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P. O. Box 5000  
Upton, NY 11973-5000  
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[blee@bnl.gov](mailto:blee@bnl.gov)

Managed by Brookhaven Science Associates  
for the U.S. Department of Energy

April 12, 2011

New York State Department of  
Environmental Conservation  
Division of Water  
Bureau of Wastewater Facilities Operation  
625 Broadway, 4<sup>th</sup> Floor  
Albany, NY 12233-3506

Gentlemen:

**SUBJECT: State Pollutant Discharge Elimination System (SPDES) NY-0005835  
Brookhaven National Laboratory (BNL) Discharge Monitoring Report (DMR)  
for March 2011**

In accordance with our SPDES permit (NY-0005835), enclosed as Attachment I, please find the DMR for the month of March 2011. General Engineering Laboratories, LLC (ELAP Certification #11501) performs most of the analyses on SPDES samples, while H2M Labs, Inc. (NELAP Certification #10478) performs the BOD-5, Nitrogen series, and fecal coliform analyses and CHEMTEX Environmental Laboratory, Inc. (NELAP Certification #02077) performs specialty analyses for tolytriazole, hydroxyethylidene diphosphonic acid, and polypropylene glycol monobutyl ether. These laboratories are certified by the New York State Department of Health. Field measured parameters (pH, settleable solids, flow) are recorded and/or measured by BNL. Copies of the analytical reports will be retained in our files and will be made available upon request.

With the exception of two (2) noncompliance events for pH, one at Outfall 005 (HS) and one at Outfall 008 (HW), review of the analytical data show that all other parameters met their respective SPDES effluent limitations this reporting period. The pH at Outfall 005 (HS) was 8.8 SU and at Outfall 008 (HW) it was 9.1 SU, which both exceeded the permit limit of 8.5 SU. Please see Attachment II for the noncompliance report, which provides more detail on the issue.

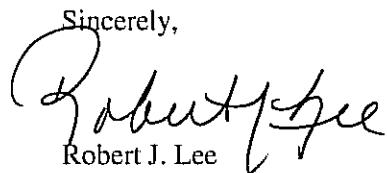
Collection and analysis of these samples are performed in accordance with the BNL Quality Assurance (QA) Program that specifies the standard operating procedures for collection and analysis of samples, QA data requirements, validation of contractor analytical data, and QA inspections performed periodically on contractor laboratories. All QA data, data validation reports, contractor laboratory assessment, and audit reports are available upon request. Based on this information, we believe the values reported on the DMR are representative of the effluent from BNL during the month of March 2011.



Registered to  
ISO 14001

If you should have any questions, please contact Jason Remien of my staff at (631) 344-3477.

Sincerely,



Robert J. Lee

Interim Environmental Protection Division Manager

RJL/JR:mjt

- Attachment I: Discharge Monitoring Report for March 2011.
- Attachment II: Noncompliance Report for pH Excursions at Outfalls 005 and 008.
- Attachment IV: Analytical Results from H2M Labs Inc. and General Engineering Laboratories, LLC for samples collected on 3/7/11, 3/9/11, and 3/11/11 from Outfall 001 (BNL Use Only).
- Attachment V: Analytical Results from General Engineering Laboratories, LLC and CHEMTEX Environmental Laboratory, Inc. for samples collected from Outfalls 001A, 001B, 001F, 002, 002B, 005, 006A, 006B, 008, and 010 (BNL Use Only).

cc: M. Bebon, w/o Attachments  
G. Goode, w/o Attachments  
M. Holland, w/o Attachments  
A. Ackerman, w/all Attachments  
E. Lessard, w/ all Attachments  
E. Murphy, w/ all Attachments  
J. Remien, w/ all Attachments  
R. Backofen, w/o Attachments  
R. Izzo, w/ all Attachments

W. Chaloupka, w/ all Attachments  
G. Granzen, w/ all Attachments  
C. Johnson, w/o Attachments  
R. Lee, w/ all Attachments  
T. Roser, w/o Attachments  
V. Radeka, w/ all Attachments  
J Sun, NYSDEC, w/ Attachment I  
C. Olsen, SCDHS, w/ Attachment I

File: EC62ER.11

**Brookhaven National Laboratory**  
**SPDES Permit No. NY0005835**  
**Discharge Monitoring Report for March 2011**  
**Discharge Monitoring Report Notes:**

1. The reported concentration is estimated at less than the method detection limit but greater than the instrument detection limit.
2. Flow is estimated based upon an instantaneous flow measurement and the assumption that flow continued for the entire day (i.e., 1,440 minutes).
3. Since flow records are maintained on a weekly or monthly basis, the flow rate provided is the daily average.
4. Testing of fathead minnow is not required at this time.
5. The pH measured at Outfall 005 (HS) did not meet the permit limit for the sample collected on March 11, 2011 during a rain event. Please see Attachment II for the Non-Compliance Report.
6. The pH measured at Outfall 008 (HW) did not meet the permit limit for the sample collected on March 11, 2011 during a rain event. Please see Attachment II for the Non-Compliance Report.

**ATTACHMENT I**  
**BROOKHAVEN NATIONAL LABORATORY**  
**SPDES PERMIT NO. NY0005835**  
**DISCHARGE MONITORING REPORT FOR MARCH 2011**  
**FOR OUTFALLS NO. 001 - 010**

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
ADDRESS 53 BELL AVENUE, BLDG 464  
UPTON, NY 11973  
FACILITY BROOKHAVEN NATIONAL LABORATORY  
LOCATION 53 BELL AVENUE, BLDG 464  
UPTON, NY 11973  
ATTN: MICHAEL HOLLAND, OFFICE MGR

Page 1

PERMIT NUMBER	001-A
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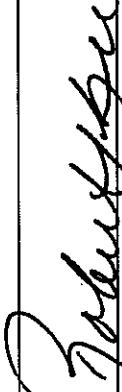
DMR MAILING ZIP CODE: 11973  
MAJOR  
(SUR 01)

ACID/CAUSTIC CLEANING RINSE 535B  
External Outfall

No Discharge

MONITORING PERIOD	
MM/DD/YYYY FROM 01/01/2011	MM/DD/YYYY TO 03/31/2011

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	UNIT	VALUE	UNIT	VALUE	UNIT			
Flow rate	SAMPLE	840	*****	*****	*****	*****	0	03/90	RC
	MEASUREMENT								
00056 1 0	PERMIT	Req. Mon. DAILY AV	g/d	*****	*****	*****			Quarterly
Effluent Gross	REQUIREMENT								RCORDR
pH	SAMPLE	*****	*****	*****	*****	*****			
	MEASUREMENT								
00400 1 0	PERMIT	Req. Mon. MINIMUM	*****	*****	*****	*****			GRAB
Effluent Gross	REQUIREMENT								

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of perjury that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering this information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Telephone	Date
Robert J. Lee Interim Division Manager Environmental Protection Division		631-344-3148	4/12/11 MM/DD/YYYY

Typed or Printed

Comments and Explanation of any violations (Reference all attachments here)

NO CHANGES OR ADDITIONS OF CHEMICALS TO COOLING OR BOILER WATER W/O PRIOR NYSDEC APPROVAL. SAMPLES TO BE COLLECTED FROM A DEDICATED DRAIN OR HOLDING TANKS PRIOR TO DISCHG TO SEWER COLLECTION SYSTEM. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS, AND REQUIREMENTS.

Page 1

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
ADDRESS 53 BELL AVENUE, BLDG 464  
FACILITY BROOKHAVEN NATIONAL LABORATORY  
LOCATION 53 BELL AVENUE, BLDG 464  
ATTN: MICHAEL HOLLAND, OFFICE MGR

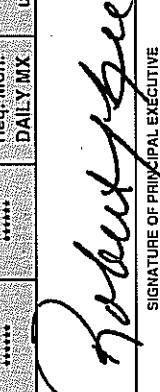
PERMIT NUMBER	DISCHARGE NUMBER
NY00056835	001-B
MONITORING PERIOD	
MM/DD/YYYY	MM/DD/YYYY
FROM 01/01/2011	TO 03/31/2011

No Discharge

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	UNITS	VALUE	UNITS	VALUE	UNITS			
Flow rate	SAMPLE	185	*****	*****	*****	*****	*****	0	01/90
00056 1 0	MEASUREMENT	Req. Mon.	DAILY AV	Gald	*****	*****	*****	*****	Quarterly
Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	*****	RCRDR
pH	SAMPLE	*****	*****	3.0	*****	3.0	0	01/90	GR
00400 1 0	MEASUREMENT	Req. Mon.	DAILY MINIMUM	*****	Req. Mon. MAXIMUM	SU	*****	*****	GRAB
Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	*****	GRAB
Chromium, total (as Cr)	SAMPLE	*****	*****	*****	*****	*****	98	0	01/90
01034 1 0	MEASUREMENT	Req. Mon.	DAILY MX	*****	Req. Mon. DAILY MX	ug/L	*****	*****	GRAB
Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	*****	GRAB
Copper, total (as Cu)	SAMPLE	*****	*****	*****	*****	*****	2710	0	01/90
01042 1 0	MEASUREMENT	PERMIT	*****	*****	*****	*****	*****	*****	GRAB
Iron, total (as Fe)	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	*****	GRAB
01045 1 0	SAMPLE	*****	*****	*****	*****	*****	972	0	01/90
Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	*****	GRAB
Manganese, total (as Mn)	SEE NOTE #1	MEASUREMENT	*****	*****	*****	*****	*****	*****	GRAB
01055 1 0	SAMPLE	PERMIT	*****	*****	*****	*****	*****	*****	GRAB
Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	*****	GRAB
Nickel, total (as Ni)	SAMPLE	*****	*****	*****	*****	*****	8.0	0	01/90
01067 1 0	MEASUREMENT	Req. Mon.	DAILY MX	*****	Req. Mon. DAILY MX	ug/L	*****	*****	GRAB
Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	*****	*****	*****	GRAB
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	Robert J. Lee	DATE							
Interim Division Manager	Environmental Protection Division	Area Code / Number	631-344-3148						
Type or Printed		MM/DD/YYYY	4/12/11						

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIVE  
OFFICER OR AUTHORIZED AGENT

  
Robert J. Lee

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
ADDRESS 53 BELL AVENUE, BLDG 464  
FACILITY BROOKHAVEN NATIONAL LABORATORY  
LOCATION 53 BELL AVENUE, BLDG 464  
ATTN: MICHAEL HOLLAND, OFFICE MGR

NY0005635	001-B	DMR MAILING ZIP CODE: 11973
PERMIT NUMBER	DISCHARGE NUMBER	MAJOR
(SUBR 01)		
RINSE FROM CENTRAL DEGREASER 498		
External Outfall		

No Discharge

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	UNITS	VALUE	UNITS	VALUE	UNITS			
Zinc, total (as Zn)	SAMPLE	*****	*****	*****	*****	*****	Req. Mon. DAILY/MX	ug/L	Quarterly
01092 1 0	SEE NOTE #1	MEASUREMENT	*****	*****	*****	*****			GRAB
Effluent Gross	PERMIT	*****	*****	*****	*****	*****			GRAB
Bis (2-ethylhexyl) phthalate	SAMPLE	*****	*****	*****	*****	*****	Req. Mon. DAILY/MX	ug/L	Quarterly
39100 1 0	MEASUREMENT	*****	*****	*****	*****	*****			GRAB
Effluent Gross	PERMIT	*****	*****	*****	*****	*****			GRAB
Di-n-butyl phthalate	SAMPLE	*****	*****	*****	*****	*****	Req. Mon. DAILY/MX	ug/L	Quarterly
39110 1 0	MEASUREMENT	*****	*****	*****	*****	*****			GRAB
Effluent Gross	PERMIT	*****	*****	*****	*****	*****	Req. Mon. DAILY/MX	ug/L	Quarterly
	REQUIREMENT	*****	*****	*****	*****	*****			GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	ROBERT J. LEE	TELEPHONE	DATE
Robert J. Lee	Interim Division Manager	631-344-3148	4/12/11
Environmental Protection Division	Area Code [ Number ]	MM/DD/YYYY	
Type or Printed	SIGNATURE OF PRINCIPAL EXECUTIVE		
	OFFICER OR AUTHORIZED AGENT		

Comments and Explanation of any violations (Reference all attachments here)  
NO CHANGES OR ADDITIONS OF CHEMICALS TO COOLING OR BOILER WATER W/O PRIOR NYSDEC APPROVAL. SAMPLES TO BE COLLECTED FROM A DEDICATED DRAIN OR HOLDING TANKS  
PRIOR TO DISCH TO SEWER COLLECTION SYSTEM. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS, AND REQUIREMENTS.

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)**  
**DISCHARGE MONITORING REPORT (DMR)**

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS 53 BELL AVENUE, BLDG 464  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION 53 BELL AVENUE, BLDG 464  
 UPTON, NY 11973  
 ATTN: MICHAEL HOLLAND, OFFICE MGR

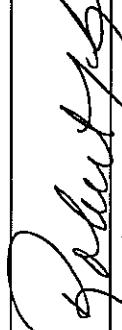
NY0005635	001-F
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD	
MM/DD/YYYY FROM 01/01/2011	MM/DD/YYYY TO 03/31/2011

DMR MAILING ZIP CODE: 11973  
 MAJOR  
 (SUBR 01)  
 COOLING TOWER WTR & BLOWDN 902  
 External Outfall  
 No Discharge

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	UNIT	VALUE	UNIT	VALUE	UNIT			
Flow rate	SAMPLE	763	*****	*****	*****	*****	0	03/90	RC
00056 1 0	MEASUREMENT	Req. Mon.	DAILY/AW	g/d	*****	*****			
Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	*****			
pH	SAMPLE	*****	*****	7.7	*****	7.7	0	01/90	GR
00400 1 0	MEASUREMENT	Req. Mon.	DAILY/AW	*****	Req. Mon. MINIMUM	*****			
Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	*****			
Propylene Glycol monobutyl Ether	SAMPLE	*****	*****	*****	*****	<500			
49875 1 0	MEASUREMENT	Req. Mon.	DAILY/AW	*****	Req. Mon. DAILY MX	*****			
Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	*****	*****			

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  Robert J. Lee Interim Division Manager Environmental Protection Division	TELEPHONE  631-344-3146	DATE  4/12/11
SIGNATURE OF PRINCIPAL EXECUTIVE  		MN/DY/YY April 12, 2011
Type or Printed		

Comments and Explanation of any violations (Reference all attachments here)  
 NO CHANGES OR ADDITIONS OF CHEMICALS TO COOLING OR BOILER WATER W/O PRIOR NYSDEC APPROVAL. SAMPLES TO BE COLLECTED FROM A DEDICATED DRAIN OR HOLDING TANKS  
 PRIOR TO DISCHARGE TO SEWER COLLECTION SYSTEM. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS, AND REQUIREMENTS.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME US DOE  
ADDRESS 53 BELL AVENUE, BLDG 4B4  
FACILITY BROOKHAVEN NATIONAL LABORATORY  
LOCATION 53 BELL AVENUE, BLDG 4B4  
ATTN: MICHAEL HOLLAND, OFFICE MGR

PERMIT NUMBER	001-M
DISCHARGE NUMBER	
MONITORING PERIOD	
MM/DD/YYYY	MM/DD/YYYY
FROM 03/01/2011	TO 03/31/2011

DMR MAILING ZIP CODE: 11973  
MAJOR  
(SUBR 01)  
PROCESS SANIT & STORMWTR RNOFF  
External Outfall

No Discharge

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	UNITS	VALUE	UNITS	VALUE	UNITS			
Temperature, water deg. Fahrenheit	SAMPLE *****	*****	*****	*****	*****	*****	50	0	01/01 GR
00011 1 0	MEASUREMENT PERMIT *****	*****	*****	*****	*****	*****	SD DAILY MX	deg F	Daily GRAB
Effluent Gross BOD, 5-day, 20 deg. C	REQUIREMENT SAMPLE *****	*****	*****	*****	*****	*****	<2	0	03/30 24
00310 1 0	MEASUREMENT PERMIT *****	*****	*****	*****	*****	*****	5 DAILY MX	mg/L	Monthly COMPP24
Effluent Gross pH	REQUIREMENT SAMPLE *****	*****	*****	*****	*****	*****	DAILY MX	mg/L	Monthly COMPP24
00400 1 0	MEASUREMENT PERMIT *****	*****	*****	*****	5.8 *****	*****	7.2	0	01/01 GR
Effluent Gross Solids, total suspended	REQUIREMENT SAMPLE *****	*****	*****	*****	*****	*****	9 MAXIMUM SU	*****	Daily GRAB
00530 1 0	MEASUREMENT PERMIT *****	*****	*****	*****	*****	*****	<0.6	0	03/30 24
Effluent Gross Solids, settleable	REQUIREMENT SAMPLE PERMIT *****	*****	*****	*****	*****	*****	20 DAILY MX	mg/L	Monthly COMPP24
00545 1 0	MEASUREMENT PERMIT *****	*****	*****	*****	*****	*****	0.0 DAILY MX	mg/L	Daily GRAB
Effluent Gross Nitrogen, total (as N)	REQUIREMENT SAMPLE PERMIT *****	*****	*****	*****	*****	*****	0.7 DAILY MX	mg/L	Daily GRAB
00600 1 1	MEASUREMENT PERMIT *****	*****	*****	*****	*****	*****	7 DAILY MX	mg/L	Monthly COMPP24
Effluent Gross Nitrogen, ammonia total (as N)	REQUIREMENT SAMPLE PERMIT *****	*****	*****	*****	*****	*****	10 DAILY MX	mg/L	Monthly COMPP24
00610 1 0	MEASUREMENT PERMIT *****	*****	*****	*****	*****	*****	0.1 DAILY MX	mg/L	Monthly COMPP24
Effluent Gross NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	REQUIREMENT	*****	*****	*****	*****	*****	1.5 DAILY MX	mg/L	Telephone DATE
Robert. J. Lee Interim Division Manager Environmental Protection Division									631-344-3148 4/12/11
Typed or Printed									Area Code   Number MM/DD/YYYY

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

SIGNATURE OF PRINCIPAL EXECUTIVE  
OFFICER OR AUTHORIZED AGENT

*Robert J. Lee*

Comments and Explanation of any violations (Reference all attachments here)  
PARAMETER HEDP IS NEW FOR THIS OUTFALL. PLEASE PLACE ITS VALUES UNDER THE PARAMETER LINE 1-HYDROXYETHYLIDENE 1,1-DIPHOSPHONIC ACID  
IS UNDER PARAMETER CODE 85812.

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)**  
**DISCHARGE MONITORING REPORT (DMR)**

**PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)**

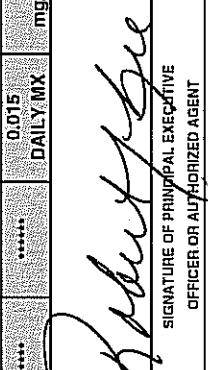
NAME U S D O E  
 ADDRESS 53 BELL AVENUE, BLDG 464  
 UPTON, NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION 53 BELL AVENUE, BLDG 464  
 UPTON, NY 11973  
 ATTN: MICHAEL HOLLAND, OFFICE MGR

Page 2

NY0005635	001-M
PERMIT NUMBER	DISCHARGE NUMBER
MONITORING PERIOD	
MM/DD/YYYY 03/01/2011	MM/DD/YYYY 03/31/2011
FROM TO	

DMR MAILING ZIP CODE: 11973  
 MAJOR  
 (SUBR 01)  
 PROCESS SANIT & STORMWTR RNOFF  
 External Outfall

No Discharge

PARAMETER	QUALITY OR LOADING				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	VALUE	UNITS	VALUE			
Phosphorus, Total (as P)	SAMPLE	*****	*****	*****	1.7		
	MEASUREMENT	*****	*****	*****		0	03/03
00665 1 0	PERMIT	*****	*****	*****			24
Effluent Gross	REQUIREMENT	*****	*****	*****			
Cyanide, Total (as CN)	SAMPLE	*****	*****	*****			
00720 1 0	MEASUREMENT	*****	*****	*****			
Effluent Gross	PERMIT	*****	*****	*****			
Copper, Total (as Cu)	SAMPLE	*****	*****	*****			
01042 1 0	MEASUREMENT	*****	*****	*****			
Effluent Gross	PERMIT	*****	*****	*****			
Iron, Total (as Fe)	REQUIREMENT	*****	*****	*****			
01045 1 0	SAMPLE	*****	*****	*****			
Effluent Gross	MEASUREMENT	*****	*****	*****			
Lead, Total (as Pb)	PERMIT	*****	*****	*****			
01051 1 0	SEE NOTE #1						
Effluent Gross	REQUIREMENT	*****	*****	*****			
Nickel, Total (as Ni)	SAMPLE	*****	*****	*****			
01067 1 0	SEE NOTE #1						
Effluent Gross	MEASUREMENT	*****	*****	*****			
Silver, Total (as Ag)	PERMIT	*****	*****	*****			
01077 1 0	SEE NOTE #1						
Effluent Gross	REQUIREMENT	*****	*****	*****			
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER							
Robert J. Lee Interim Division Manager Environmental Protection Division							
Comments and Explanation of any violations (Reference all attachments here) PARAMETER HEDP IS NEW FOR THIS OUTFALL PLEASE PLACE ITS VALUES UNDER THE PARAMETER LINE 1-HYDROXYETHYLIDENE 1-DIPHOSPHONIC ACID IS UNDER PARAMETER CODE 85812.							
Typed or Printed							
 Signature of Principal Executive Officer							
DATE MM/DD/YYYY 631-344-3148							
Attn Code   Number MM/DD/YYYY							

Page 2

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME US DOE  
ADDRESS 53 BELL AVENUE, BLDG 464  
UPTON, NY 11973  
FACILITY BROOKHAVEN NATIONAL LABORATORY  
LOCATION 53 BELL AVENUE, BLDG 464  
UPTON, NY 11973  
ATTN: MICHAEL HOLLAND, OFFICE MGR

Page 3

NY00000005	001-M
PERMIT NUMBER	DISCHARGE NUMBER
MONITORING PERIOD	
MM/DD/YYYY 03/01/2011	MM/DD/YYYY 03/31/2011
FROM	TO

DMR MAILING ZIP CODE: 11973  
MAJOR  
(SUBR 01)  
PROCESS SANIT & STORMWTR RNOFF  
External Outfall

No Discharge

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	UNITS	VALUE	UNITS	VALUE	UNITS			
Zinc, total (as Zn)	SAMPLE *****	*****	SAMPLE *****	*****	DAILY MX 0.1	mg/L	0	03/30	24
01092 1 0 Effluent Gross Toluene	PERMIT *****	*****	PERMIT *****	*****	DAILY MX	mg/L	0	03/30	COMP24
SEE NOTE #1	MEASUREMENT SAMPLE *****	*****	MEASUREMENT SAMPLE *****	*****	DAILY MX 0.3	ug/L	0	03/30	GR
34010 1 0 Effluent Gross Methylene chloride	PERMIT *****	*****	PERMIT *****	*****	DAILY MX 5	ug/L	0	03/30	GRAB Twice Per Month
34423 1 0 Effluent Gross	MEASUREMENT SAMPLE *****	*****	MEASUREMENT SAMPLE *****	*****	DAILY MX 2	ug/L	0	03/30	GR
1, 1, 1 - Trichloroethane	PERMIT *****	*****	PERMIT *****	*****	DAILY MX 5	ug/L	0	03/30	GRAB Twice Per Month
34506 1 0 Effluent Gross Flow, in conduit or thru treatment plant	MEASUREMENT SAMPLE 0.27	0.38	MEASUREMENT SAMPLE 0.27	0.38	DAILY MX 1	ug/L	0	03/30	GR
50050 1 0 Effluent Gross Mercury, total (as Hg)	PERMIT Rec Mon 2.3 DAILY AV	Mg/ard	PERMIT Rec Mon 2.3 DAILY AV	Mg/ard	DAILY MX 5	ug/L	0	03/30	GRAB Twice Per Month
71900 1 0 Effluent Gross Coliform, fecal general	MEASUREMENT SAMPLE *****	*****	MEASUREMENT SAMPLE *****	*****	DAILY MX 4B	ug/L	0	03/30	GR
74055 1 0 Effluent Gross	PERMIT *****	*****	PERMIT *****	*****	DAILY MX 200	ug/L	0	03/30	GRAB Continuous
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified persons properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.			 Robert J. Lee Interim Division Manager Environmental Protection Division			DATE 4/12/11 MM/DD/YYYY		
Type or Printed							SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		

Comments and Explanation of any violations (Reference all attachments here)  
PARAMETER HEDP IS NEW FOR THIS OUTFALL PLEASE PLACE ITS VALUES UNDER THE PARAMETER LINE 1-HYDROXYETHYLIDENE 1,1-DIPHOSPHONIC ACID  
IS UNDER PARAMETER CODE 85812.

Page 3

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME US DOE  
ADDRESS 53 BELL AVENUE, BLDG 464  
FACILITY BROOKHAVEN NATIONAL LABORATORY  
LOCATION 53 BELL AVENUE, BLDG 464  
ATTN: MICHAEL HOLLAND, OFFICE MGR

Page 4

PERMIT NUMBER	001-M
DISCHARGE NUMBER	
MONITORING PERIOD	
FROM MM/DD/YYYY 03/01/2011	TO MM/DD/YYYY 03/31/2011

DMR MAILING ZIP CODE: 11973  
MAJOR  
(SUB 01)  
PROCEES SANIT & STORMWTR RNOFF  
External Outfall

No Discharge

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	UNITS	VALUE	UNITS	VALUE	UNITS			
2 - Butanone	SAMPLE *****	*****	*****	*****	*****	<5	0	03/30	GR
78356 1 0 Effluent Gross	MEASUREMENT PERMIT	*****	*****	*****	*****	DAILY MX		Twice Per Month	GRAB
BOD, 5-day, percent removal	SAMPLE *****	*****	*****	*****	*****	ug/L	0	01/30	CA
81010 K 0 Percent Removal	MEASUREMENT PERMIT	*****	*****	*****	*****	mg/L		Monthly	CALCTD
Solids, suspended percent removal	SAMPLE *****	*****	*****	*****	*****	%			
81011 K 0 Percent Removal	MEASUREMENT PERMIT	*****	*****	*****	*****	mg/L	0	01/30	CA
HEDP	SAMPLE *****	*****	*****	*****	*****	%			
85812 1 0 Effluent Gross	MEASUREMENT PERMIT	*****	*****	*****	*****	mg/L		Monthly	COMP24
Tolymazole	SAMPLE *****	*****	*****	*****	*****	mg/L			
85813 1 0 Effluent Gross	MEASUREMENT PERMIT	*****	*****	*****	*****	mg/L	0	01/30	24
	REQUIREMENT	*****	*****	*****	*****	DAILY MX			

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for violations.	Signature of Principal Executive Officer or Authorized Agent
Robert, J. Lee Interim Division Manager Environmental Protection Division	<i>Robert J. Lee</i>	DATE 4/12/11 MM/DD/YYYY
Type or Printed		Comments and Explanation of any violations (Reference all attachments here) PARAMETER HEDP IS NEW FOR THIS OUTFALL PLEASE PLACE ITS VALUES UNDER THE PARAMETER LINE 1-HYDROXYETHYLIDENE 1,1-DIPHOSPHONIC ACID IS UNDER PARAMETER CODE 85812.
Area Code   Number		

AD

Page 4

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)**  
**DISCHARGE MONITORING REPORT (DMR)**

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS 53 BELL AVENUE, BLDG 464  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION 53 BELL AVENUE, BLDG 464  
 ATTN: MICHAEL HOLLAND, OFFICE MGR

PERMIT NUMBER	001-Q
DISCHARGE NUMBER	

DMR MAILING ZIP CODE: 11973  
 MAJOR  
 (SUBR 01)  
 PROCESS SANIT EFFL & STORMWTR  
 External Outfall

No Discharge

MONITORING PERIOD	
MM/DD/YYYY	MM/DD/YYYY
FROM 01/01/2011	TO 03/31/2011

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	VALUE	UNITS	VALUE	VALUE	UNITS			
Polychlorinated biphenyls (PCBs)	SAMPLE	*****	*****	*****	*****	<0.03	0	03/90	GR
39516 1 0	MEASUREMENT	*****	*****	*****	*****	Rq. Mon. DAILY/MX	0	03/90	GRAB
Effluent Gross	PERMIT	*****	*****	*****	*****	DAILY/MX	0	03/90	GRAB
Toxicity, ceriodaphnia chronic	SAMPLE	*****	*****	*****	*****	DAILY/MX	0	01/90	24
61426 1 0	MEASUREMENT	*****	*****	*****	*****	DAILY/MX	0	01/90	24
Effluent Gross	PERMIT	*****	*****	*****	*****	DAILY/MX	0	01/90	24
Toxicity, pinephales chronic	SAMPLE	*****	*****	*****	*****	DAILY/MX	0	01/90	24
SEE NOTE #4	MEASUREMENT	*****	*****	*****	*****	DAILY/MX	0	01/90	24
61428 1 0	PERMIT	*****	*****	*****	*****	DAILY/MX	0	01/90	24
Effluent Gross	REQUIREMENT	*****	*****	*****	*****	DAILY/MX	0	01/90	24

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.		
Robert J. Lee Interim Division Manager Environmental Protection Division	Signature of Principal Executive	Telephone	Date
	<i>Robert J. Lee</i>	631-344-3148	4/12/11
Type or Printed	Area Code   Number	MM/DD/YYYY	

Comments and Explanation of any violations (Reference all attachments here)  
 PCB ANALYSIS TO USE EPA METHOD 608 WITH AN MDL GOAL OF 0.065 PPB.

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)**  
**DISCHARGE MONITORING REPORT (DMR)**

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS 53 BELL AVENUE, BLDG 464  
 UPTON, NY 11973  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION 53 BELL AVENUE, BLDG 464  
 UPTON, NY 11973  
 ATTN: MICHAEL HOLLAND, OFFICE MGR

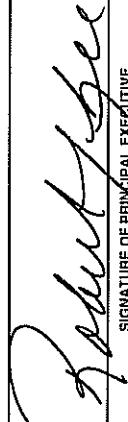
PERMIT NUMBER	002-B
DISCHARGE NUMBER	
MONITORING PERIOD	
FROM MM/DD/YYYY	MM/DD/YYYY
03/01/2011	TO 03/31/2011

DMR MAILING ZIP CODE: 11973  
 MAJOR  
 (SUB) 01  
 RF(1004) & BRAHMS(1002) BLOWDN  
 External Outfall

No Discharge

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	UNITS	VALUE	UNITS	VALUE	UNITS			
PH	SAMPLE ****	*****	8.6	*****	8.6	*****	0	01/30	GR
00400 1 0 Effluent Gross	MEASUREMENT PERMIT REQUIREMENT	*****	*****	Req. Mon. MINIMUM	*****	9 MAXIMUM	SU	Monthly	GRAB
Oil & grease	SEE NOTE #1	SAMPLE MEASUREMENT PERMIT REQUIREMENT	*****	*****	*****	*****	2.0	0	01/30 GR
00556 1 0 Effluent Gross	Flow, In conduit or thru treatment plant	SAMPLE MEASUREMENT PERMIT REQUIREMENT	*****	*****	*****	*****	15 DAILY, MX	mg/L	Monthly GRAB
50050 1 0 Effluent Gross	SEE NOTE #3	SAMPLE MEASUREMENT PERMIT REQUIREMENT	0.02	*****	*****	*****	*****	0	04/30 RC
									Monthly RCORDR

Page 1

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	 Robert J. Lee Interim Division Manager Environmental Protection Division	TELEPHONE	DATE
Type or Printed			631-344-3148	4/12/11
			Area Code / Number	MM/DD/YYYY
			SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	

Comments and Explanation of any violations (Reference all attachments here)

DISCHARGE MAY BE DIRECTED TO SURROUNDING LOW LYING AREA INSIDE THE ROADWAY THAT IS INSIDE RHIC RING. ONCE STORMWATER COLLECTION SYSTEM IS EXTENDED TO BLDG 1010 AND A NEW RECHARGE BASIN IS CONSTRUCTED, DISCHARGE SHOULD BE TO NEW BASIN.

Page 1

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
ADDRESS 53 BELL AVENUE, BLDG 464  
FACILITY BROOKHAVEN NATIONAL LABORATORY  
LOCATION 53 BELL AVENUE, BLDG 464  
ATTN: MICHAEL HOLLAND, OFFICE MGR

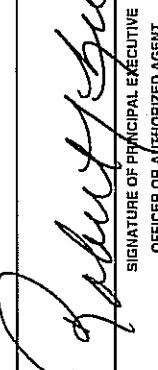
PERMIT NUMBER	002-M
DISCHARGE NUMBER	
MONITORING PERIOD	
MM/DD/YYYY FROM 03/01/2011	MM/DD/YYYY TO 03/31/2011

DMR MAILING ZIP CODE: 11973  
MAJOR  
(SUBR 01)  
AGS NON-C COOLING,PRCP,ETC (HN)  
External Outfall

No Discharge

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	UNITS	VALUE	UNITS	VALUE	UNITS			
pH	SAMPLE	*****	*****	*****	7.2	*****	8.0	0	04/30 GR
00400 1 0	MEASUREMENT	*****	*****	*****	Req. Min.	*****	9		
Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	MAXIMUM	*****	SU		
Oil & grease	SAMPLE	*****	*****	*****	*****	*****	2.3	0	01/30 GR
00556 1 0	SEE NOTE #1 MEASUREMENT	*****	*****	*****	*****	*****	15		
Effluent Gross	PERMIT REQUIREMENT	*****	*****	*****	DAILY MAX	*****	mg/L		
Flow, in conduit or thru treatment plant	SAMPLE	0.01	*****	*****	*****	*****	*****	0	04/30 RC
50050 1 0	MEASUREMENT	*****	*****	*****	*****	*****	*****		
Effluent Gross	PERMIT REQUIREMENT	DAILY AV	Mg/a/d	*****	*****	*****	*****		

Page 1

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER Robert J. Lee Interim Division Manager Environmental Protection Division	TELEPHONE 631-344-3148	DATE 4/12/11
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT 	Area Code / Number- MM/DD/YYYY	

Comments and Explanation of any violations (Reference all attachments here)  
SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS AND REQUIREMENTS. SAMPLING FOR THIS OUTFALL SHALL BE CONDUCTED AT A LOCATION DOWNSTREAM OF WHERE EXISTING  
DISCHARGE MIXES WITH THE COOLING TOWER BLOWDOWN FROM THE STAR DETECTOR.

Page 1

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
ADDRESS 53 BELL AVENUE, BLDG 464  
FACILITY BROOKHAVEN NATIONAL LABORATORY  
LOCATION 53 BELL AVENUE, BLDG 464  
ATTN: MICHAEL HOLLAND, OFFICE MGR

PERMIT NUMBER	DISCHARGE NUMBER
NY0005635	002-Q
MONITORING PERIOD	
MM/DD/YYYY 01/01/2011	MM/DD/YYYY 03/31/2011

No Discharge

DMR MAILING ZIP CODE: 11973  
MAJOR  
(SUBR 01)  
AGS NON-C COOLG, PRECP ETC (HN)  
External Outfall

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	VALUE	UNITS	VALUE	VALUE	UNITS			
Aluminum, total (as Al)	SAMPLE	*****	*****	*****	*****	<0.07	0	01/90	GR
01105 1 0 Effluent Gross	MEASUREMENT	*****	*****	*****	*****	2	DAILY MX	mg/L	Quarterly
Dichlorodrommethane	PERMIT	*****	*****	*****	*****	*****	DAILY MX	mg/L	GRAB
3210† 1 0 Effluent Gross	REQUIREMENT	*****	*****	*****	*****	<1	DAILY MX	ug/L	Quarterly
Chloroform	SAMPLE	*****	*****	*****	*****	50	DAILY MX	ug/L	GRAB
3210† 1 0 Effluent Gross	MEASUREMENT	*****	*****	*****	*****	*****	DAILY MX	ug/L	Quarterly
1, 1, 1 -Trichloroethane	PERMIT	*****	*****	*****	*****	7	DAILY MX	ug/L	GRAB
34506 1 0 Effluent Gross	REQUIREMENT	*****	*****	*****	*****	<1	DAILY MX	ug/L	Quarterly
HEDP	SAMPLE	*****	*****	*****	*****	0	01/90	GR	GRAB
05812 1 0 Effluent Gross	MEASUREMENT	*****	*****	*****	*****	5	DAILY MX	ug/L	Quarterly
Tolytriazole	PERMIT	*****	*****	*****	*****	<0.3	DAILY MX	mg/L	GRAB
65813 1 0 Effluent Gross	REQUIREMENT	*****	*****	*****	*****	0.5	DAILY MX	mg/L	Quarterly

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER Robert J. Lee Interim Division Manager Environmental Protection Division	TELEPHONE 631-344-3146	DATE 4/12/11
SIGNATURE OF PRINCIPAL EXECUTIVE 		Area Code / Number MM/DD/YYYY
Type or Printed	OFFICER OR AUTHORIZED AGENT	

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified persons properly gather and evaluate information submitted. Based on my inquiry of one person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Comments and Explanation of any violations (Reference all attachments here)  
NO ADDITIONAL WATER TREATMENT CHEMICAL ADDITIVES W/O PRIOR NYSDEC APPROVAL. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS, AND REQUIREMENTS. SAMPLING TO BE DOWNSTREAM OF WHERE EXISTING DISCHARGE MIXES WITH COOLING TOWER BLOWDOWN FROM STAR DETECTOR.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location If Different)

NAME U S D O E  
ADDRESS 53 BELL AVENUE, BLDG 464  
          UPTON, NY 11973  
FACILITY BROOKHAVEN NATIONAL LABORATORY  
LOCATION 53 BELL AVENUE, BLDG 464  
          UPTON, NY 11973  
ATTN: MICHAEL HOLLAND, OFFICE MGR

PERMIT NUMBER	002-F
DISCHARGE NUMBER	

MONITORING PERIOD	
MM/DD/YYYY FROM 01/01/2011	MM/DD/YYYY TO 03/31/2011

No Discharge

DMR MAILING ZIP CODE: 11973  
MAJOR  
(SUBR 01)  
RF(1004) & BRAHMS(1002) BLOWDN  
External Outfall

PARAMETER	QUALITY OR CONCENTRATION				NO. OF EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE	
	VALUE	UNITS	VALUE	UNITS				
HEDP	SAMPLE *****	*****	*****	*****	<0.05	0	01/30	GR
	MEASUREMENT *****	*****	*****	*****	0.5	DAILY/MX	mg/L	GRAB
85812 1 0	PERMIT *****	*****	*****	*****			Quarterly	
EFFLUENT GROSS	REQUIREMENT *****	*****	*****	*****				
ToluInzole	SAMPLE *****	*****	*****	*****	<0.005	0	01/30	GR
	MEASUREMENT *****	*****	*****	*****	0.2	DAILY/MX	mg/L	GRAB
86813 1 0	PERMIT *****	*****	*****	*****			Quarterly	
EFFLUENT GROSS	REQUIREMENT *****	*****	*****	*****				

Page 1

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER Robert, J. Lee Interim Division Manager Environmental Protection Division	TELEPHONE 631-344-3148	DATE 4/12/11
Area Code / Number		MM/DD/YYYY
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT 		

Comments and Explanation of any violations (Reference all attachments here)  
DISCHARGE MAY BE DIRECTED TO SURROUNDING LOW LYING AREA INSIDE THE ROADWAY THAT IS INSIDE RHIC RING. ONCE STORMWATER COLLECTION SYSTEM IS EXTENDED TO BLDG 1010 AND A NEW RECHARGE BASIN IS CONSTRUCTED, DISCHARGE SHOULD BE DIRECTED TO THE NEW BASIN.

Typed or Printed

Page 1

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
ADDRESS 53 BELL AVENUE, BLDG 464  
FACILITY BROOKHAVEN NATIONAL LABORATORY  
LOCATION 53 BELL AVENUE, BLDG 464  
ATTN: MICHAEL HOLLAND, OFFICE MGR

PERMIT NUMBER	005-M
---------------	-------

MONITORING PERIOD	
FROM	MM/DD/YYYY 03/01/2011
TO	MM/DD/YYYY 03/31/2011

DMR MAILING ZIP CODE: 11973  
MAJOR  
(SUPER 01)  
NSLS COOLING TOWER BLDN ETC (HS)  
External Outfall

No Discharge

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	UNITS	VALUE	UNITS	VALUE	UNITS			
pH	SAMPLE	*****	*****	7.1	*****	8.8	1	04/30	GR
00400 1 0 Effluent Gross	SEE NOTE #5 MEASUREMENT PERMIT REQUIREMENT	*****	*****	Req. Mon. MINIMUM	*****	8.5 MAXIMUM	SU	Monthly	GRAB
Oil & grease	SEE NOTE #1 MEASUREMENT PERMIT REQUIREMENT	*****	*****	*****	*****	1.5	0	01/30	GR
00556 1 0 Effluent Gross	Flow, in conduit or thru treatment plant	SAMPLE	*****	*****	*****	DAILY MAX	mg/L	Monthly	GRAB
50050 1 0 Effluent Gross	MEASUREMENT PERMIT REQUIREMENT	0.70	MO AV	*****	*****	*****	RC	04/30	RC

Page 1

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	Robert J. Lee Interim Division Manager Environmental Protection Division	TELEPHONE	DATE
		631-344-1148	4/12/11
		Area Code / Number	MM/DD/YYYY
		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	

Comments and Explanation of any violations (Reference all attachments here)  
SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS, AND REQUIREMENTS.

Page 1

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)**  
**DISCHARGE MONITORING REPORT (DMR)**

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS 53 BELL AVENUE, BLDG 464  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION 53 BELL AVENUE, BLDG 464  
 ATTN: MICHAEL HOLLAND, OFFICE MGR

NY0005835	005-Q
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD	
MM/DD/YYYY FROM 01/01/2011	MM/DD/YYYY TO 03/31/2011

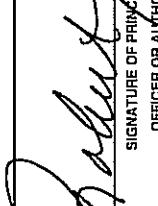
No Discharge

DMR MAILING ZIP CODE: 11973  
 MAJOR  
 (SUBR 01)  
 NSLS COOLG TOWER BLOWDN ETC (HS)

External Outfall

No Discharge

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	UNITS	VALUE	UNITS	VALUE	UNITS			
Copper, total (as Cu) SEE NOTE #1	SAMPLE *****	*****	*****	*****	*****	*****	<0.003	0	01/90 GR
01042 1 0 Effluent Gross HEDP	PERMIT *****	*****	*****	*****	*****	*****	DAILY MAX	mg/L	Quarterly GRAB
85812 1 0 Effluent Gross Tolyliazole	SAMPLE *****	*****	*****	*****	*****	*****	DAILY MAX	mg/L	Quarterly GRAB
85813 1 0 Effluent Gross	PERMIT *****	*****	*****	*****	*****	*****	0.5	0.3	0 01/90 GR
	SAMPLE *****	*****	*****	*****	*****	*****	DAILY MAX	mg/L	Quarterly GRAB
	MEASUREMENT *****	*****	*****	*****	*****	*****	0.005	<0.005	0 01/90 GR
	PERMIT *****	*****	*****	*****	*****	*****	0.2	0.2	0 01/90 GR
	SAMPLE *****	*****	*****	*****	*****	*****	DAILY MAX	mg/L	Quarterly GRAB
	MEASUREMENT *****	*****	*****	*****	*****	*****			
	PERMIT *****	*****	*****	*****	*****	*****			
	REQUIREMENT *****	*****	*****	*****	*****	*****			

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER  Robert J. Lee Interim Division Manager Environmental Protection Division	IDENTIFY under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	TELEPHONE 631-344-3148	DATE 4/12/11
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT  		Area Code / Number MM/DD/YYYY	

Comments and Explanation of any violations (Reference all attachments here)  
 NO ADDITIONAL WATER TREATMENT CHEMICAL ADDITIVES W/O PRIOR NYSDEC APPROVAL. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS, AND REQUIREMENTS.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
ADDRESS 53 BELL AVENUE, BLDG 464  
UPTON, NY 11973  
FACILITY BROOKHAVEN NATIONAL LABORATORY  
LOCATION 53 BELL AVENUE, BLDG 464  
UPTON, NY 11973  
ATTN: MICHAEL HOLLAND, OFFICE MGR

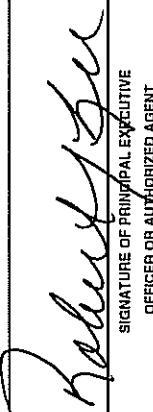
NY00056835	007-M
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD	
MM/DD/YYYY 03/01/2011	MM/DD/YYYY TO 03/31/2011

No Discharge

DMR MAILING ZIP CODE: 11973  
MAJOR  
(SUB 01)  
WATER TREATMENT PLT BKWSH (HX)  
External Outfall

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	VALUE	UNITS	VALUE	VALUE	UNITS			
Flow rate	SAMPLE	*****	160000	*****	*****	*****	0	1730	IN
00056 1 0	MEASUREMENT	*****	Req. Mon.	*****	*****	*****			
Effluent Gross	PERMIT	*****	DAILY MX	gal/d	*****	*****			
pH	SAMPLE	*****	*****	*****	*****	*****			
00400 1 0	MEASUREMENT	*****	*****	7.7	*****	7.7	0	01/30	GR
Effluent Gross	PERMIT	*****	*****	Req. Mon.	*****	*****			
	REQUIREMENT	*****	*****	MINIMUM	*****	*****			
				MAXIMUM	*****	*****			
				SU	*****	*****			

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER Robert J. Lee Interim Division Manager Environmental Protection Division	TELEPHONE 631-344-3148	DATE 4/12/11
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT 		Area Code / Number MM/DD/YYYY

Comments and Explanation of any violations (Reference all attachments here)  
SAMPLES TO BE COLLECTED AT EFFLUENT PIPE TO WHICHEVER BASIN IS IN OPERATION AT THE TIME. STANDING WATER IN EITHER BASIN SHALL NOT BE COLLECTED FOR DMR SAMPLING PURPOSES. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS, AND REQUIREMENTS.

Typed or Printed

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS /Include Facility Name/Location if Different)

NAME US DOE  
ADDRESS 53 BELL AVENUE, BLDG 464  
UPTON, NY 11973  
FACILITY BROOKHAVEN NATIONAL LABORATORY  
LOCATION 53 BELL AVENUE, BLDG 464  
UPTON, NY 11973  
ATTN: MICHAEL HOLLAND, OFFICE MGR

	PERMIT NUMBER	DISCHARGE NUMBER
	NY00059835	008-M

DMR MAILING ZIP CODE: 11973  
MAJOR  
(SUBR 01)  
STORMWTR RUNOFF WAREHOUSE (HW)  
External Outfall

No Discharge

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	UNITS	VALUE	UNITS	VALUE	UNITS			
Flow rate	SAMPLE	*****	103800	*****	*****	*****	0	01/30	IN
	SEE NOTE #2	MEASUREMENT	*****	Req. Mon.	*****	*****			
00056 1 0	PERMIT	*****	DAILY MX	gal/d	*****	*****			
Effluent Gross	REQUIREMENT	*****	*****	*****	*****	*****			
pH	SAMPLE	*****	*****	*****	*****	*****			
	SEE NOTE #6	MEASUREMENT	*****	*****	*****	*****			
00400 1 0	PERMIT	*****	*****	*****	Req. Mon.	6.5			
Effluent Gross	REQUIREMENT	*****	*****	*****	MINIMUM	*****			
Oil & grease	SAMPLE	*****	*****	*****	*****	*****			
	SEE NOTE #1	MEASUREMENT	*****	*****	*****	*****			
00556 1 0	PERMIT	*****	*****	*****	*****	*****			
Effluent Gross	REQUIREMENT	*****	*****	*****	*****	*****			
1,1 - Dichloroethylene	SAMPLE	*****	*****	*****	*****	*****			
	MEASUREMENT	*****	*****	*****	*****	*****			
34501 1 0	PERMIT	*****	*****	*****	*****	*****			
Effluent Gross	REQUIREMENT	*****	*****	*****	*****	*****			
1,1, 1 - Trichloroethane	SAMPLE	*****	*****	*****	*****	*****			
	MEASUREMENT	*****	*****	*****	*****	*****			
34506 1 0	PERMIT	*****	*****	*****	*****	*****			
Effluent Gross	REQUIREMENT	*****	*****	*****	*****	*****			

Page 1

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who made the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	TELEPHONE	DATE
Robert J. Lee Interim Division Manager Environmental Protection Division		631-344-3148	4/12/11
Type or Printed	Signature of Principal Executive Officer or Authorized Agent		
Comments and Explanation of any violations (Reference all attachments here) PARAMETERS EXCEPT FOR FLOW TO BE SAMPLED MONTHLY DURING A STORM EVENT. (IF NO DISCHARGE, ENTER AN "X" IN THE "NO DISCHARGE" BOX AT THE UPPER RIGHT.) SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS, AND REQUIREMENTS			

Page 1

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
ADDRESS 53 BELL AVENUE, BLDG 464  
UPTON, NY 11973  
FACILITY BROOKHAVEN NATIONAL LABORATORY  
LOCATION 53 BELL AVENUE, BLDG 464  
UPTON, NY 11973  
ATTN: MICHAEL HOLLAND, OFFICE MGR

PERMIT NUMBER	NY0005835	DISCHARGE NUMBER	00B-Q
MONITORING PERIOD	MM/DD/YYYY 01/01/2011	MM/DD/YYYY TO 03/31/2011	
FROM			
			No Discharge <input type="checkbox"/>

DMR MAILING ZIP CODE: 11973  
MAJOR  
(SUBR 01)  
SW RUNOFF FROM WAREHOUSE AREA  
External Outfall

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. OF EX ANALYSIS	FREQUENCY OF EX ANALYSIS	SAMPLE TYPE
	VALUE	UNIT	MEASUREMENT	VALUE	UNIT	PERMIT REQUIREMENT			
Aluminum, dissolved (as Al)	SAMPLE *****	*****	MEASUREMENT *****	*****	*****	PERMIT REQUIREMENT *****	0	0/90	GR
01106 1 0 Effluent Gross							2	DAILY/MX	GRAB mg/L

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER Robert J. Lee Interim Division Manager Environmental Protection Division Typed or Printed	TELEPHONE 631-344-3148	DATE 4/12/11
	Area Code / Number	MM/DD/YYYY
SIGNATURE OF PRINCIPAL EXECUTIVE Officer or Authorized Agent 		

Comments and Explanation of any violations (Reference all attachments here)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
ADDRESS 53 BELL AVENUE, BLDG 464  
FACILITY BROOKHAVEN NATIONAL LABORATORY  
LOCATION 53 BELL AVENUE, BLDG 464  
ATTN: MICHAEL HOLLAND, OFFICE MGR

NY0005635	010-M
PERMIT NUMBER	DISCHARGE NUMBER
SEE NOTE #2	
MONITORING PERIOD	
MM/DD/YYYY FROM 03/01/2011	MM/DD/YYYY TO 03/31/2011

DMR MAILING ZIP CODE: 11973  
MAJOR  
(SUB R 01)  
STORMWTR R O CENTRAL STREAM (H)  
External Outfall

No Discharge

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	UNITS	VALUE	UNITS	VALUE	UNITS			
Flow rate	SAMPLE	*****	10600		*****	*****	0	01/30	IN
50050 1 0	SEE NOTE #2	MEASUREMENT	*****	Req. Mon.	*****	*****		Monthly	INSTAN
Effluent Gross	PERMIT	*****	DAILY/MX	gal/d	*****	*****			
pH	SAMPLE	*****	*****	*****	*****	*****			
00400 1 0	MEASUREMENT	*****	*****	*****	*****	*****			
Effluent Gross	PERMIT	*****	*****	*****	Req. Mon.	*****			
Oil & grease	SEE NOTE #1	REQUIREMENT	*****	MINIMUM	*****	*****			
00556 1 0	MEASUREMENT	*****	*****	*****	*****	*****			
Effluent Gross	PERMIT	*****	*****	*****	*****	*****			
	REQUIREMENT	*****	*****	*****	*****	*****			

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, this information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Typed or Printed

  
Robert J. Lee  
Interim Division Manager  
Environmental Protection Division

SIGNATURE OF PRINCIPAL EXECUTIVE  
OFFICER OR AUTHORIZED AGENT

TELEPHONE	DATE
631-344-3148	4/12/11

Area Code | Number

MM/DD/YYYY

Comments and Explanation of any violations (Reference all attachments here)  
PARAMETERS EXCEPT FLOW TO BE SAMPLED MONTHLY DURING A STORM EVENT. (IF NO DISCHARGE, ENTER AN "X" IN THE "NO DISCHARGE" BOX AT THE UPPER RIGHT.)  
SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS, AND REQUIREMENTS.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
ADDRESS 53 BELL AVENUE, BLDG 464  
FACILITY BROOKHAVEN NATIONAL LABORATORY  
LOCATION 53 BELL AVENUE, BLDG 464  
ATTN: MICHAEL HOLLAND, OFFICE MGR

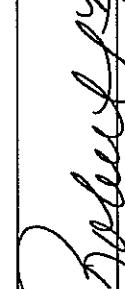
NY0005835	010-Q
PERMIT NUMBER	DISCHARGE NUMBER
MONITORING PERIOD	
MM/DD/YYYY FROM 01/01/2011	MM/DD/YYYY TO 03/31/2011

No Discharge

Page 1

DMR MAILING ZIP CODE: 11973  
MAJOR  
(SUBR 01)  
SW RUNOFF FROM CENTRAL STM (H)  
External Outfall

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	VALUE	UNITS	VALUE	VALUE	UNITS			
Copper, dissolved (as Cu)	SAMPLE *****	*****	*****	*****	<0.001		0	01/90	GR
01040 1 0	MEASUREMENT *****	*****	*****	*****	DAILY	MX mg/L		Quarterly	GRAB
Effluent Gross	PERMIT *****	*****	*****	*****	DAILY	MX mg/L		Quarterly	GRAB
Lead, dissolved (as Pb)	SAMPLE *****	*****	*****	*****	<0.0005		0	01/90	GR
01049 1 0	MEASUREMENT *****	*****	*****	*****	DAILY	MX mg/L		Quarterly	GRAB
Effluent Gross	PERMIT *****	*****	*****	*****	DAILY	MX mg/L		Quarterly	GRAB
Vanadium, dissolved ( as V)	SAMPLE *****	*****	*****	*****	0.001		0	01/90	GR
SEE NOTE #1	MEASUREMENT *****	*****	*****	*****	DAILY	MX mg/L		Quarterly	GRAB
01085 1 0	PERMIT *****	*****	*****	*****	Req. Mon.	DAILY		Quarterly	GRAB
Effluent Gross	REQUIREMENT *****	*****	*****	*****	DAILY	MX mg/L		Quarterly	GRAB
Aluminum, dissolved (as Al)	SAMPLE *****	*****	*****	*****	<0.07		0	01/90	GR
01106 1 0	MEASUREMENT *****	*****	*****	*****	DAILY	MX mg/L		Quarterly	GRAB
Effluent Gross	PERMIT *****	*****	*****	*****	DAILY	MX mg/L		Quarterly	GRAB
	REQUIREMENT *****	*****	*****	*****	DAILY	MX mg/L		Quarterly	GRAB

NAME/TITLE: PRINCIPAL EXECUTIVE OFFICER Robert, J. Lee Interim Division Manager Environmental Protection Division	TELEPHONE 631-344-3140	DATE MM/DD/YYYY March 2011
SIGNATURE OF PRINCIPAL EXECUTIVE 		Attn Code / Number
Typed or Printed Comments and Explanation of any violations (Reference all attachments here)	OFFICER OR AUTHORIZED AGENT	

Page 1

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
ADDRESS 53 BELL AVENUE, BLDG 464  
FACILITY BROOKHAVEN NATIONAL LABORATORY  
LOCATION 53 BELL AVENUE, BLDG 464  
ATTN: MICHAEL HOLLAND, OFFICE MGR

PERMIT NUMBER	06A-M
DISCHARGE NUMBER	

MONITORING PERIOD	
MM/DD/YYYY FROM 03/01/2011	MM/DD/YYYY TO 03/31/2011

No Discharge

DMR MAILING ZIP CODE: 11973  
MAJOR  
(SUBR 01)

LINAC NCCW, FLOOR DNS,ETC (HT1)  
External Outfall

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	UNITS	VALUE	UNITS	VALUE	UNITS			
pH	SAMPLE	*****	*****	7.4	*****	7.8	0	04/30	GR
00400 1 0	MEASUREMENT	*****	*****	Req. Mon.	*****	9			
Effluent Gross	PERMIT	*****	*****	MINIMUM	*****	SU			
Oil & grease	SEE NOTE #1	SAMPLE	*****	*****	*****	*****	0	01/30	GR
00556 1 0	MEASUREMENT	*****	*****	*****	*****	DAILY/MX			
Effluent Gross	PERMIT	*****	*****	*****	*****	mg/L			
Flow, in conduit or thru treatment plant	SAMPLE	*****	*****	*****	*****	*****			
50050 1 0	MEASUREMENT	0.13	*****	*****	*****	*****	0	04/30	RC
Effluent Gross	PERMIT	Req. Mon.	*****	*****	*****	*****			
	REQUIREMENT	DAILY AV	*****	*****	*****	*****			

Page 1

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	Robert, J. Lee Interim Division Manager Environmental Protection Division	Telephone 631-344-3148	Date et/12/11
		Signature of Principal Executive Officer or Authorized Agent	Area Code   Number MM/DD/YYYY	

Comments and Explanation of any violations (Reference all attachments here)  
SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS, AND REQUIREMENTS.

Page 1

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
ADDRESS 53 BELL AVENUE, BLDG 464  
UPTON, NY 11973  
FACILITY BROOKHAVEN NATIONAL LABORATORY  
LOCATION 53 BELL AVENUE, BLDG 464  
UPTON, NY 11973  
ATTN: MICHAEL HOLLAND, OFFICE MGR

NY0005835	06A-Q
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD	
MM/DD/YYYY 01/01/2011	MM/DD/YYYY 03/31/2011
FROM	TO

No Discharge

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	VALUE	UNITS	VALUE	VALUE	UNITS			
HEDP	SAMPLE	*****	*****	*****	*****	<0.3	0	01/90	GR
85812 1 0	MEASUREMENT	*****	*****	*****	*****	0.5		Quarterly	GRAB
Effluent Gross	PERMIT	*****	*****	*****	*****	DAILY MX			
Tolytriazole	REQUIREMENT	*****	*****	*****	*****				
85813 1 0	SAMPLE	*****	*****	*****	*****	<.0005	0	01/90	GR
Effluent Gross	MEASUREMENT	*****	*****	*****	*****	0.2		Quarterly	GRAB
	PERMIT	*****	*****	*****	*****	DAILY MX			
	REQUIREMENT	*****	*****	*****	*****				

Page 1

DMR MAILING ZIP CODE: 11973  
MAJOR  
(SUBR 01)  
LINAC NCCW, FLOOR DNS, SW (HT1)  
External Outfall

No Discharge

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER Robert, J. Lee Interim Division Manager Environmental Protection Division	TELEPHONE 631-344-3148	DATE 4/12/11
Area Code / Number:		MM/DD/YYYY
SIGNATURE OF PRINCIPAL/EXECUTIVE OFFICER OR AUTHORIZED AGENT		

Comments and Explanation of any violations (Reference all attachments here)

NO ADDITIONAL WATER TREATMENT CHEMICAL ADDITIVES W/O PRIOR NYSDEC APPROVAL. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS, AND REQUIREMENTS.

Page 1

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)**  
**DISCHARGE MONITORING REPORT (DMR)**

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
 ADDRESS 53 BELL AVENUE, BLDG 464  
 FACILITY BROOKHAVEN NATIONAL LABORATORY  
 LOCATION 53 BELL AVENUE, BLDG 464  
 ATTN: MICHAEL HOLLAND, OFFICE MGR

Page 1

NY0005835	06B-M
PERMIT NUMBER	DISCHARGE NUMBER
MONITORING PERIOD	
MM/DD/YYYY 03/01/2011	MM/DD/YYYY 03/31/2011
FROM	TO
No Discharge <input type="checkbox"/>	

DMR MAILING ZIP CODE: 11973  
 MAJOR  
 (SUB R01)  
 COOLING TOWER FROM 919, FLOOR DRAINS  
 External Outfall

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
pH	SAMPLE	*****	*****	7.5	*****	8.4	0	04/30	GR
00400 1 0	MEASUREMENT	*****	*****	Req. Mon.	*****	9	0	04/30	GRAB
Effluent Gross	PERMIT	*****	*****	MINIMUM	*****	MAXIMUM	0	04/30	GRAB
Oil & grease	SEE NOTE #1	SAMPLE	*****	*****	*****	*****	0	01/30	GR
00556 1 0	MEASUREMENT	*****	*****	*****	*****	*****	0	01/30	GRAB
Effluent Gross	PERMIT	*****	*****	*****	*****	*****	0	01/30	GRAB
Flow, in conduit or thru treatment plant	REQUIREMENT	SAMPLE	*****	*****	*****	*****	0	04/30	RC
50050 1 0	MEASUREMENT	0.06	*****	*****	*****	*****	0	04/30	RC
Effluent Gross	PERMIT	Req. Mon.	*****	Mg/acid	*****	*****	0	04/30	RCORDR
	REQUIREMENT	DAILY/AV	*****	*****	*****	*****	0	04/30	RCORDR

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.		
Robert J. Lee Interim Division Manager Environmental Protection Division	Telephone	Date	4/12/11
	631-344-3148	MM/DD/YYYY	
	Area Code / Number.		
	SIGNATURE OF PRINCIPAL EXECUTIVE		
	OFFICER OR AUTHORIZED AGENT		

Comments and Explanation of any violations (Reference all attachments here)  
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Typed or Printed

Page 1

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
DISCHARGE MONITORING REPORT (DMR)

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NAME U S D O E  
ADDRESS 53 BELL AVENUE, BLDG 464  
UPTON, NY 11973  
FACILITY BROOKHAVEN NATIONAL LABORATORY  
LOCATION 53 BELL AVENUE, BLDG 464  
UPTON, NY 11973  
ATTN: MICHAEL HOLLAND, OFFICE MGR

NY0005835	06B-Q
PERMIT NUMBER	DISCHARGE NUMBER

MONITORING PERIOD	
MM/DD/YYYY FROM 01/01/2011	MM/DD/YYYY TO 03/31/2011

No Discharge

DMR MAILING ZIP CODE: 11973  
MAJOR  
(SUBR 01)  
COOL G TOWRS FROM 919 ETC (HT2)  
External Outfall

PARAMETER	QUALITY OR LOADING				QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
	VALUE	VALUE	UNITS	UNITS	VALUE	VALUE	UNITS	UNITS			
HEDP	SAMPLE	*****	*****	*****	*****	<0.3	0.5	DAILY MX	0	01/90	GR
	MEASUREMENT	*****	*****	*****	*****	*****	*****	mg/L		Quarterly	GRAB
85812 1 0	PERMIT	*****	*****	*****	*****	*****	*****	DAILY MX		Quarterly	GRAB
Effluent Gross	REQUIREMENT	*****	*****	*****	*****	*****	*****	mg/L		Quarterly	GRAB
Tolyflazole	SAMPLE	*****	*****	*****	*****	*****	*****	DAILY MX	0	01/90	GR
	MEASUREMENT	*****	*****	*****	*****	*****	*****	mg/L		Quarterly	GRAB
85813 1 0	PERMIT	*****	*****	*****	*****	*****	*****	DAILY MX		Quarterly	GRAB
Effluent Gross	REQUIREMENT	*****	*****	*****	*****	*****	*****	mg/L		Quarterly	GRAB

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER Robert J. Lee Interim Division Manager Environmental Protection Division	I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified persons properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.	TELEPHONE 631-344-3148	DATE 4/12/11
Comments and Explanation of any violations (Reference all attachments here) NO ADDITIONAL WATER TREATMENT CHEMICAL ADDITIVES W/O PRIOR NYSDEC APPROVAL. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS, AND REQUIREMENTS.		Area Code / Number	MM/DD/YYYY
		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	

Typed or Printed

Comments and Explanation of any violations (Reference all attachments here)

NO ADDITIONAL WATER TREATMENT CHEMICAL ADDITIVES W/O PRIOR NYSDEC APPROVAL. SEE PERMIT FOR ADDITIONAL NOTES, COMMENTS, AND REQUIREMENTS.

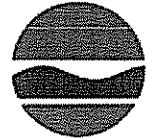
**ATTACHMENT II**

**BROOKHAVEN NATIONAL LABORATORY**

**SPDES PERMIT NO. NY0005835**

**DISCHARGE MONITORING REPORT FOR MARCH 2011**

**NONCOMPLIANCE REPORT**

**SECTION 1**

*New York State Department of Environmental Conservation  
Division of Water*



**Report of Noncompliance Event**

To: DEC Water Contact: Mr. Joe Sun, Ph.D., P.E. DEC Region: 1

Report Type: 5-Day  Permit Violation  Order Violation  Anticipated Noncompliance  Bypass/Overflow

**SECTION 2**

SPDES #: NY- 0005835 Facility: U.S. Department of Energy/Brookhaven National Laboratory

Date of noncompliance: 3/11/2011 Location (Outfall, Treatment Unit, or Pump Station): 005 (HS) and 008 (HW)

Description of noncompliance(s) and cause(s): Samples collected from Outfalls 005 (HS) and 008 (HW) on 3/11/11 had a pH of 8.8 and 9.1 SU, respectively, which exceeded the SPDES permit level of 8.5 SU. The most likely cause of this pH excursion is from construction activities associated with the National Synchrotron Light Source (NSLS)-II (concrete forming/washout activities and construction of road/parking lot base using recycled concrete aggregate (RCA)). During heavy rain events, both of these outfalls receive a significant amount of stormwater from the NSLS-II construction site.

Has event ceased?  (Yes)  (No) If so, when? 3/12/11 Was event due to plant upset?  (Yes)  (No) SPDES limits violated?  (Yes)  (No)

Start date, time of event:   |   (AM) (PM) End date, time of event:   |   (AM) (PM)  
 Date                              Time                              Date                              Time

Date, time oral notification made to DEC?   |   (AM) (PM) DEC Official contacted: \_\_\_\_\_  
 Date                              Time

**Immediate corrective actions:** An inspection of the NSLS-II construction site on April 6, 2011 by BNL's Environmental Protection Division revealed several issues with stormwater control management, including poorly protected stormwater catch basins near the small concrete batch plant and an area that recently had RCA placed down to expand a parking lot. The NSLS-II Construction Project Team was directed to repair all stormwater controls around the catch basins and also consider berming the area to contain storm water at the site.

**Preventative (long term) corrective actions:** BNL will continue to monitor the pH levels at Outfalls 005 and 008 during rain events to ensure any corrective actions implemented by the NSLS-II Project Team are effective and that pH levels are within effluent limits.

**SECTION 3**

Complete this section if event was a bypass:

Bypass amount: \_\_\_\_\_ Was prior DEC authorization received for this event?  (Yes)  (No)

DEC Official contacted: \_\_\_\_\_ Date of DEC approval: \_\_\_\_\_ Date

Describe event in "Description of noncompliance and cause" area in Section 2. Detail the start and end dates and times in Section 2 also.

**SECTION 4**

Facility Representative: <u>Robert J. Lee, P.E.</u>	Title: <u>Interim Division Manager</u>	Date
Phone #: <u>(631) 344-3148</u>	Fax #: <u>(631) 344-5812</u>	

I Certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

  
 Signature of Principal Executive Officer or Authorized Agent

**ATTACHMENT III**

**BROOKHAVEN NATIONAL LABORATORY**

**SPDES PERMIT NO. NY0005835**

**DISCHARGE MONITORING REPORT FOR MARCH 2011**

**ANALYTICAL RESULTS FROM H2M LABS**

**AND GENERAL ENGINEERING LABORATORIES, LLC**

**FOR REGULATORY COMPLIANCE SAMPLES COLLECTED**

**3/7/11, 3/9/11, and 3/11/11**

**FROM OUTFALL 001**



labs

575 Broad Hollow Melville, NY 11747

TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

Brookhaven National Lab.-BNL  
70 Bell Ave.  
Upton, NY 11973  
Attn To : Bob Lee

LABORATORY RESULTS

For the submitted sample

Lab No. : 1103289-001

Client Sample ID. : 31016-001

## Sample Information...

Type : Aqueous

Origin:

Collected : 3/7/2011 11:00:00 AM

Received : 3/7/2011 3:00:00 PM

Collected By CLIENT

Copies To :

CC

Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Biochemical Oxygen Demand	<2		1	mg/L	SM5210B	03/09/2011 8:30 AM
Nitrogen, Ammonia (As N)	0.11		1	mg/L	SM4500-NH3 H	03/09/2011 2:11 PM
Nitrite as N	< 0.01		1	mg/L	E353.2	03/08/2011 8:17 AM
Nitrate as N	6.62	D	10	mg/L	E353.2	03/08/2011 9:35 AM
Nitrogen, Total	6.62		1	mg/L	M4500-N C	03/18/2011
Nitrogen, Kjeldahl, Total	< 0.10		1	mg/L	E351.2	03/15/2011 5:32 PM

outfall 001  
3/7/11

24 hour composite

## Qualifiers:

E = Value above quantitation range

D = Results for Dilution

D.F. = Dilution Factor

H = Received/analyzed outside of analytical holding time

*Joann M. Stevin*

Laboratory Manager

Date Reported : 3/22/2011

Page 1 of 4

BNLS940 A27



labs

575 Broad Hollow Melville, NY 11747

TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 1103443-001

Brookhaven National Lab.-BNLs

Client Sample ID. : 31026-001

70 Bell Ave.

## Sample Information...

Type : Aqueous

Upton, NY 11973

Origin:

Attn To : Bob Lee

Collected : 3/9/2011 11:00:00 AM

Received : 3/9/2011 3:00:00 PM

Collected By CLIENT

Copies To :

CC

Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Biochemical Oxygen Demand	< 2		1	mg/L	SM5210B	03/10/2011 11:25 AM
Nitrogen, Ammonia (As N)	0.11		1	mg/L	SM4500-NH3 H	03/14/2011 3:48 PM
Nitrite as N	< 0.01		1	mg/L	E353.2	03/10/2011 10:40 AM
Nitrate as N	5.12	D	10	mg/L	E353.2	03/10/2011 11:50 AM
Nitrogen, Total	5.11		1	mg/L	M4500-N C	03/18/2011
Nitrogen, Kjeldahl, Total	< 0.10		1	mg/L	E351.2	03/15/2011 5:34 PM

Outfall 001

3/9/11

24 hour composite

## Qualifiers:

E = Value above quantitation range

D = Results for Dilution

D.F. = Dilution Factor

H = Received/analyzed outside of analytical holding time

*Joann M. Stecins*

Laboratory Manager



labs

575 Broad Hollow Melville, NY 11747

TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 1103516-001

Brookhaven National Lab.-BNLs

Client Sample ID. : 31034-001

70 Bell Ave.

Upton, NY 11973

Attn To : Bob Lee

## Sample Information...

Type : Aqueous

Origin:

Collected : 3/11/2011 10:00:00 AM

Received : 3/11/2011 3:20:00 PM

Collected By CLIENT

Copies To :

CC

Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Biochemical Oxygen Demand	< 2		1	mg/L	SM5210B	03/11/2011 3:35 PM
Nitrogen, Ammonia (As N)	0.11		1	mg/L	SM4500-NH3 H	03/18/2011 1:25 PM
Nitrite as N	< 0.01		1	mg/L	E353.2	03/12/2011 7:26 AM
Nitrate as N	7.37	D	10	mg/L	E353.2	03/12/2011 8:24 AM
Nitrogen, Total	7.37		1	mg/L	M4500-N C	03/18/2011
Nitrogen, Kjeldahl, Total	< 0.10		1	mg/L	E351.2	03/15/2011 5:35 PM

Outfall 001  
3/11/11  
24 hour composite

## Qualifiers:

E = Value above quantitation range

D = Results for Dilution

D.F. = Dilution Factor

H = Received/analyzed outside of analytical holding time

Laboratory Manager



labs

575 Broad Hollow Melville, NY 11747  
TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

Brookhaven National Lab.-BNL  
70 Bell Ave.  
Upton, NY 11973  
Attn To : Bob Lee

Collected : 3/7/2011 11:10:00 AM  
Received : 3/7/2011 3:00:00 PM  
Collected By CLIENT  
Copies To :  
CC

### LABORATORY RESULTS

For the submitted sample

Lab No. : 1103289-002

Client Sample ID. : 31016-002

Sample Information...  
Type : Aqueous

Origin:

Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Total Coliform	< 2		1	MPN	SM9221BE	03/07/2011 3:30 PM
Fecal Coliform	< 2		1	MPN	SM9221BE	03/07/2011 3:30 PM

Outfall 001

3/7/11

Grab

**Qualifiers:**

E = Value above quantitation range

D = Results for Dilution

D.F. = Dilution Factor

H = Received/analyzed outside of analytical holding time

Laboratory Manager



2 labs

575 Broad Hollow Melville, NY 11747

TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

**LABORATORY RESULTS**

For the submitted sample

**Lab No. : 1103443-002**

Brookhaven National Lab.-BNLs

Client Sample ID. : 31026-002

**Sample Information...**

Type : Aqueous

70 Bell Ave.

Upton, NY 11973

Attn To : Bob Lee

Origin:

Collected : 3/9/2011 11:10:00 AM

Received : 3/9/2011 3:00:00 PM

Collected By CLIENT

Copies To :

CC

Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Total Coliform	< 2	1	MPN		SM9221BE	03/09/2011 4:00 PM
Fecal Coliform	< 2	1	MPN		SM9221BE	03/09/2011 4:00 PM

Outfall 001  
Sampled 3/9/11  
Grab

**Qualifiers:**

E = Value above quantitation range

D = Results for Dilution

D.F. = Dilution Factor

H = Received/analyzed outside of analytical holding time

*Jeanne M. Stevens*

Laboratory Manager



labs

575 Broad Hollow Melville, NY 11747

TEL: 631-694-3040 FAX: 631-420-8436 NYSOEH ID#10478

LABORATORY RESULTS

For the submitted sample

Lab No. : 1103516-002

Brookhaven National Lab.-BNLs

Client Sample ID. : 31034-002

## Sample Information...

Type : Aqueous

70 Bell Ave.

Upton, NY 11973

Attn To : Bob Lee

Origin:

Collected : 3/11/2011 10:10:00 AM

Received : 3/11/2011 3:20:00 PM

Collected By CLIENT

Copies To :

CC

Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Total Coliform	<2		1	MPN	SM9221BE	03/11/2011 4:30 PM
Fecal Coliform	<2		1	MPN	SM9221BE	03/11/2011 4:30 PM

Outfall 001

3/11/11

Grab

## Qualifiers:

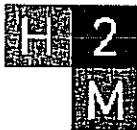
E = Value above quantitation range

D = Results for Dilution

D.F. = Dilution Factor

H = Received/analyzed outside of analytical holding time

Laboratory Manager

2  
labs

575 Broad Hollow Melville, NY 11747

TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

Brookhaven National Lab.-BNLS

70 Bell Ave.

Upton, NY 11973

Attn To : Bob Lee

Collected : 3/7/2011 11:55:00 AM

Received : 3/7/2011 3:00:00 PM

Collected By CLIENT

Copies To :

CC

LABORATORY RESULTS

For the submitted sample

Lab No. : 1103289-003

Client Sample ID. : 31016-003

## Sample Information...

Type : Aqueous

Origin:

Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Biochemical Oxygen Demand	212	1		mg/L	SM5210B	03/09/2011 8:40 AM

STP Influent

3/7/11

24 hour composite

## Qualifiers:

E = Value above quantitation range

D = Results for Dilution

D.F. = Dilution Factor

H = Received/analyzed outside of analytical holding time

*Jeanne M. Davis*

Laboratory Manager



labs

LABORATORY RESULTS

575 Broad Hollow Melville, NY 11747

TEL: 631-694-3040 FAX: 631-420-8436 NYSDOH ID#10478

Lab No. : 1103443-003

Brookhaven National Lab.-BNLS

70 Bell Ave.

Upton, NY 11973

Attn To : Bob Lee

For the submitted sample

Client Sample ID. : 31026-003

Sample Information...

Type : Aqueous

Collected : 3/9/2011 11:40:00 AM

Received : 3/9/2011 3:00:00 PM

Collected By CLIENT

Copies To :

CC

Origin:

Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Biochemical Oxygen Demand	38		1	mg/L	SM5210B	03/10/2011 11:30 AM

STP Influent

3/9/11

29 hour composite

## Qualifiers:

E = Value above quantitation range

D = Results for Dilution

D.F. = Dilution Factor

H = Received/analyzed outside of analytical holding time

Laboratory Manager



labs

575 Broad Hollow Melville, NY 11747

TEL: 631-684-3040 FAX: 631-420-8436 NYSDOH ID#10478

**LABORATORY RESULTS**

For the submitted sample

Brookhaven National Lab.-BNL

70 Bell Ave.

Upton, NY 11973

Attn To : Bob Lee

Lab No. : 1103516-003

Client Sample ID. : 31034-003

**Sample Information...**

Type : Aqueous

Origin:

Collected : 3/11/2011 11:00:00 AM

Received : 3/11/2011 3:20:00 PM

Collected By CLIENT

Copies To :

CC

Parameter(s)	Results	Qualifier	D.F.	Units	Method Number	Analyzed
Biochemical Oxygen Demand	72		1	mg/L	SM5210B	03/11/2011 3:40 PM

STP Influent

3/11/11

24 hour composite

**Qualifiers:**

E = Value above quantitation range

D = Results for Dilution

D.F. = Dilution Factor

H = Received/analyzed outside of analytical holding time

*Jeanne M. Stevens*

Laboratory Manager

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: March 29, 2011

Company : Brookhaven National Laboratory  
Address : Building 462

Contact: Upton, New York 11973-5000  
Project: Mr. John Burke  
Project: ES SPDES - Summary

Client Sample ID:	31017-001	Project:	BRKL00604
Sample ID:	273547001	Client ID:	BRKL006
Matrix:	W	COC:	31017
Collect Date:	07-MAR-11 11:00	Samp Recv.:	
Receive Date:	08-MAR-11 08:45	Client Desc.:	STP Effluent
Collector:	Client	Vol. Recv.:	

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Mercury Analysis-CVAA</b>											
7470 Cold Vapor Hg Liquid "As Received"											
Mercury	U	ND	0.066	0.200	ug/L	1	ETL	03/21/11	0611	1081397	1
<b>Metals Analysis-ICP</b>											
6010 TAL Metals Liquid "As Received"											
Aluminum	U	ND	68.0	200	ug/L	1	CYLI	03/15/11	1806	1081381	2
Antimony	U	ND	3.50	60.0	ug/L	1					
Barium	J	23.3	1.00	200	ug/L	1					
Beryllium	U	ND	1.00	5.00	ug/L	1					
Cadmium	U	ND	1.00	5.00	ug/L	1					
Calcium		15400	50.0	5000	ug/L	1					
Chromium	U	ND	1.00	10.0	ug/L	1					
Cobalt	U	ND	1.00	50.0	ug/L	1					
Copper		32.8	3.00	25.0	ug/L	1					
Iron		229	30.0	100	ug/L	1					
Magnesium	J	3720	110	5000	ug/L	1					
Manganese	J	2.82	2.00	15.0	ug/L	1					
Nickel	J	3.65	1.50	40.0	ug/L	1					
Potassium		7180	50.0	5000	ug/L	1					
Silver	U	ND	1.00	10.0	ug/L	1					
Sodium		50200	100	5000	ug/L	1					
Tin	U	ND	2.50	10.0	ug/L	1					
Vanadium	J	1.19	1.00	50.0	ug/L	1					
Zinc		53.5	3.30	20.0	ug/L	1					
<b>Metals Analysis-ICP-MS</b>											
3005/6020 Arsenic "As Received"											
Arsenic	U	ND	1.70	15.0	ug/L	1	RMJ	03/24/11	1829	1081377	3
Lead	J	2.09	0.500	10.0	ug/L	1					
Selenium	U	ND	1.50	15.0	ug/L	1					
Thallium	U	ND	0.450	20.0	ug/L	1	RMJ	03/26/11	0523	1081377	4
<b>Nutrient Analysis</b>											
EPA 365.4 Phosphorus, Total in "As Received"											
Phosphorus, Total as P		1.66	0.015	0.050	mg/L	1	KLPI	03/11/11	1533	1081419	5
<b>Solids Analysis</b>											
SM 2540D Total Suspended Liq "As Received"											
Total Suspended Solids	U	ND	0.570	2.50	mg/L	1	LYG1	03/09/11	1024	1081166	6

The following Prep Methods were performed

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: March 29, 2011

Company : Brookhaven National Laboratory  
Address : Building 462

Contact: Upton, New York 11973--5000  
Mr. John Burke  
Project: ES SPDES - Summary

Client Sample ID: 31017-002  
Sample ID: 273547002  
Matrix: W  
Collect Date: 07-MAR-11 11:10  
Receive Date: 08-MAR-11 08:45  
Collector: Client

Project: BRKL00604  
Client ID: BRKL006  
COC: 31017  
Samp Recv.:  
Client Desc.: STP Effluent  
Vol. Recv.:

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<b>SW9012A Cyanide, Total "As Received"</b>											
Cyanide, Total	U	ND	1.70	5.00	ug/L	1	SDS	03/11/11	1059	1081476	1
<b>Volatile Organics</b>											
<b>EPA 624 Method List "As Received"</b>											
1,1,1-Trichloroethane	U	ND	0.325	1.00	ug/L	1	SYK1	03/10/11	2126	1082193	2
1,1,2,2-Tetrachloroethane	U	ND	0.250	1.00	ug/L	1					
1,1,2-Trichloroethane	U	ND	0.250	1.00	ug/L	1					
1,1-Dichloroethane	U	ND	0.300	1.00	ug/L	1					
1,1-Dichloroethylene	U	ND	0.300	1.00	ug/L	1					
1,2-Dichlorobenzene	U	ND	0.250	1.00	ug/L	1					
1,2-Dichloroethane	U	ND	0.250	1.00	ug/L	1					
1,2-Dichloropropane	U	ND	0.250	1.00	ug/L	1					
1,3-Dichlorobenzene	U	ND	0.250	1.00	ug/L	1					
1,4-Dichlorobenzene	U	ND	0.250	1.00	ug/L	1					
2-Butanone	U	ND	1.25	5.00	ug/L	1					
2-Chloroethylvinyl ether	U	ND	1.50	5.00	ug/L	1					
2-Hexanone	U	ND	1.25	5.00	ug/L	1					
4-Methyl-2-pentanone	U	ND	1.25	5.00	ug/L	1					
Acetone	U	ND	1.50	5.00	ug/L	1					
Acetonitrile	U	ND	6.25	25.0	ug/L	1					
Benzene	U	ND	0.300	1.00	ug/L	1					
Bromodichloromethane	U	ND	0.250	1.00	ug/L	1					
Bromoform	U	ND	0.250	1.00	ug/L	1					
Bromomethane	U	ND	0.300	1.00	ug/L	1					
Carbon tetrachloride	U	ND	0.300	1.00	ug/L	1					
Chlorobenzene	U	ND	0.250	1.00	ug/L	1					
Chloroethane	U	ND	0.300	1.00	ug/L	1					
Chloroform	U	ND	0.250	1.00	ug/L	1					
Chloromethane	U	ND	0.300	1.00	ug/L	1					
Dibromochloromethane	U	ND	0.300	1.00	ug/L	1					
Ethylbenzene	U	ND	0.250	1.00	ug/L	1					
Methylene chloride	U	ND	2.00	2.00	ug/L	1					
Tetrachloroethylene	U	ND	0.300	1.00	ug/L	1					
Toluene	J	0.320	0.250	1.00	ug/L	1					
Trichloroethylene	U	ND	0.250	1.00	ug/L	1					
Trichlorofluoromethane	U	ND	0.300	1.00	ug/L	1					
Vinyl chloride	U	ND	0.500	1.00	ug/L	1					
cis-1,3-Dichloropropylene	U	ND	0.250	1.00	ug/L	1					

Out fall 001  
3/7/11  
Grab

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: March 29, 2011

Company : Brookhaven National Laboratory  
Address : Building 462

Contact: Upton, New York 11973-5000  
Project: ES SPDES - Summary

Client Sample ID: 31017-003  
Sample ID: 273547003  
Matrix: W  
Collect Date: 07-MAR-11 11:55  
Receive Date: 08-MAR-11 08:45  
Collector: Client

Project: BRKL00604  
Client ID: BRKL006  
COC: 31017  
Samp Recv.:  
Client Desc.: STP Influent  
Vol. Recv.:

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Mercury Analysis-CVAA</b>											
7470 Cold Vapor Hg Liquid "As Received"											
Mercury	U	ND	0.066	0.200	ug/L	1	ETL	03/21/11	0621	1081397	1
<b>Metals Analysis-ICP</b>											
6010 TAL Metals Liquid "As Received"											
Aluminum		1650	68.0	200	ug/L	1	CYLI	03/15/11	1817	1081381	2
Antimony	U	ND	3.50	60.0	ug/L	1					
Barium		412	1.00	200	ug/L	1					
Beryllium	U	ND	1.00	5.00	ug/L	1					
Cadmium	J	1.52	1.00	5.00	ug/L	1					
Calcium		26600	50.0	5000	ug/L	1					
Chromium		13.9	1.00	10.0	ug/L	1					
Cobalt	J	3.12	1.00	50.0	ug/L	1					
Copper		734	3.00	25.0	ug/L	1					
Iron		4460	30.0	100	ug/L	1					
Magnesium		5220	110	5000	ug/L	1					
Manganese		46.9	2.00	15.0	ug/L	1					
Nickel	J	30.5	1.50	40.0	ug/L	1					
Potassium		6490	50.0	5000	ug/L	1					
Silver	J	5.56	1.00	10.0	ug/L	1					
Sodium		49700	100	5000	ug/L	1					
Tin		11.3	2.50	10.0	ug/L	1					
Vanadium	J	17.6	1.00	50.0	ug/L	1					
Zinc		522	3.30	20.0	ug/L	1					
<b>Metals Analysis-ICP-MS</b>											
3005/6020 Arsenic "As Received"											
Arsenic	J	5.28	1.70	15.0	ug/L	1	RMJ	03/24/11	1855	1081377	3
Lead		49.4	0.500	10.0	ug/L	1					
Selenium	U	ND	1.50	15.0	ug/L	1					
Thallium	U	ND	0.450	20.0	ug/L	1	RMJ	03/26/11	0519	1081377	4
<b>Solids Analysis</b>											
SM 2540D Total Suspended Liq "As Received"											
Total Suspended Solids		514	25.9	114	mg/L		LYGI	03/09/11	1024	1081166	5

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005 PREP	LYHI	03/15/11	0930	1081376

STP Influent  
Sampled 3/7/11  
24 hour composite

**GEL LABORATORIES LLC**  
 2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: March 29, 2011

Company : Brookhaven National Laboratory  
 Address : Building 462

Upton, New York 11973--5000

Contact: Mr. John Burke  
 Project: ES SPDES - Summary

Client Sample ID: 31017-001  
 Sample ID: 273547006  
 Matrix: W  
 Collect Date: 07-MAR-11 11:00  
 Receive Date: 08-MAR-11 08:45  
 Collector: Client

Project: BRKL00604  
 Client ID: BRKL006  
 COC: 31017  
 Samp Recv.:  
 Client Desc.: STP Effluent  
 Vol. Recv.:

Parameter	Qualifier	Result	DL	RL	Units	DF	Analys	Date	Time	Batch	Method
<b>Semi-Volatile-GC/MS</b>											
3510C/8270C BNA Liquid "As Received"											
1,2,4-Trichlorobenzene	U	ND	1.94	10.0	ug/L	1	AGSI	03/14/11	2218	1082387	1
1,2-Dichlorobenzene	U	ND	1.94	10.0	ug/L	1					
1,3-Dichlorobenzene	U	ND	1.94	10.0	ug/L	1					
1,4-Dichlorobenzene	U	ND	1.94	10.0	ug/L	1					
2,4,6-Trichlorophenol	U	ND	1.94	10.0	ug/L	1					
2,4-Dichlorophenol	U	ND	1.94	10.0	ug/L	1					
2,4-Dimethylphenol	U	ND	1.94	10.0	ug/L	1					
2,4-Dinitrophenol	U	ND	4.85	50.0	ug/L	1					
2,4-Dinitrotoluene	U	ND	1.94	10.0	ug/L	1					
2,6-Dinitrotoluene	U	ND	1.94	10.0	ug/L	1					
2-Chloronaphthalene	U	ND	0.291	10.0	ug/L	1					
2-Chlorophenol	U	ND	1.94	10.0	ug/L	1					
2-Methyl-4,6-dinitrophenol	U	ND	2.91	50.0	ug/L	1					
2-Nitrophenol	U	ND	1.94	10.0	ug/L	1					
3,3'-Dichlorobenzidine	U	ND	1.94	40.0	ug/L	1					
4-Bromophenylphenylether	U	ND	1.94	10.0	ug/L	1					
4-Chloro-3-methylphenol	U	ND	1.94	10.0	ug/L	1					
4-Chlorophenylphenylether	U	ND	1.94	10.0	ug/L	1					
4-Nitrophenol	U	ND	1.94	50.0	ug/L	1					
Acenaphthene	U	ND	0.301	10.0	ug/L	1					
Acenaphthylene	U	ND	0.194	10.0	ug/L	1					
Anthracene	U	ND	0.194	10.0	ug/L	1					
Benzo(a)anthracene	U	ND	0.194	10.0	ug/L	1					
Benzo(a)pyrene	U	ND	0.194	10.0	ug/L	1					
Benzo(b)fluoranthene	U	ND	0.194	10.0	ug/L	1					
Benzo(ghi)perylene	U	ND	0.194	10.0	ug/L	1					
Benzo(k)fluoranthene	U	ND	0.194	10.0	ug/L	1					
Butylbenzylphthalate	U	ND	1.94	10.0	ug/L	1					
Chrysene	U	ND	0.194	10.0	ug/L	1					
Di-n-butylphthalate	U	ND	1.94	10.0	ug/L	1					
Di-n-octylphthalate	U	ND	2.91	10.0	ug/L	1					
Dibenz(a,h)anthracene	U	ND	0.194	10.0	ug/L	1					
Diethylphthalate	U	ND	1.94	10.0	ug/L	1					
Dimethylphthalate	U	ND	1.94	10.0	ug/L	1					
Diphenylamine	U	ND	2.91	10.0	ug/L	1					
Fluoranthene	U	ND	0.194	10.0	ug/L	1					
Fluorene	U	ND	0.194	10.0	ug/L	1					
Hexachlorobenzene	U	ND	1.94	10.0	ug/L	1					

Outfall 001

3/7/11

Grab

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: March 29, 2011

Company : Brookhaven National Laboratory  
Address : Building 462

Contact: Upton, New York 11973-5000  
Mr. John Burke  
Project: ES SPDES - Summary

Client Sample ID: 31017-002  
Sample ID: 273547005  
Matrix: W  
Collect Date: 07-MAR-11 11:10  
Receive Date: 08-MAR-11 08:45  
Collector: Client

Project: BRKL00604  
Client ID: BRKL006  
COC: 31017  
Samp Recv.:  
Client Desc.: STP Effluent  
Vol. Recv.:

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Semi-Volatiles-Pesticide</b>											
608/3510C Pest/PCB Liquid Fed "As Received"											
4,4'-DDD	U	ND	0.00194	0.00777	ug/L	2	RXE1	03/22/11	1945	1082361	1
4,4'-DDE	U	ND	0.000971	0.00777	ug/L	2					
4,4'-DDT	U	ND	0.00194	0.00777	ug/L	2					
Aldrin	U	ND	0.000971	0.00388	ug/L	2					
Aroclor-1016	U	ND	0.0323	0.0971	ug/L	2					
Aroclor-1221	U	ND	0.0323	0.0971	ug/L	2					
Aroclor-1232	U	ND	0.0323	0.0971	ug/L	2					
Aroclor-1242	U	ND	0.0323	0.0971	ug/L	2					
Aroclor-1248	U	ND	0.0323	0.0971	ug/L	2					
Aroclor-1254	U	ND	0.0323	0.0971	ug/L	2					
Aroclor-1260	U	ND	0.0323	0.0971	ug/L	2					
Chlordane (tech.)	U	ND	0.0149	0.0485	ug/L	2					
Dieldrin	U	ND	0.00194	0.00777	ug/L	2					
Endosulfan I	U	ND	0.000971	0.00388	ug/L	2					
Endosulfan II	U	ND	0.00194	0.00777	ug/L	2					
Endosulfan sulfate	U	ND	0.00194	0.00777	ug/L	2					
Endrin	U	ND	0.00194	0.00777	ug/L	2					
Endrin aldehyde	U	ND	0.000971	0.00777	ug/L	2					
Heptachlor	U	ND	0.000971	0.00388	ug/L	2					
Heptachlor epoxide	U	ND	0.000971	0.00388	ug/L	2					
Toxaphene	U	ND	0.0291	0.0971	ug/L	2					
alpha-BHC	U	ND	0.000971	0.00388	ug/L	2					
beta-BHC	U	ND	0.00117	0.00388	ug/L	2					
gamma-BHC (Lindane)	U	ND	0.000971	0.00388	ug/L	2					
delta-BHC		0.0315	0.000971	0.00388	ug/L	2	RXE1	03/22/11	1945	1082361	2

*Outfall 001*  
*3/7/11*  
*Grab*

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C-608 PEST/PCB Prep Liquid	RXE1	03/11/11	1245	1082359

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 608	
2	EPA 608	

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**Certificate of Analysis**

Report Date: March 29, 2011

Company : Brookhaven National Laboratory  
Address : Building 462

Contact: Upton, New York 11973--5000  
Mr. John Burke  
Project: ES SPDES - Summary

Client Sample ID:	31017-002	Project:	BRKL00604
Sample ID:	273538001	Client ID:	BRKL006
Matrix:	W	COC:	31017
Collect Date:	07-MAR-11 11:10	Samp Recv.:	
Receive Date:	08-MAR-11 08:44	Client Desc.:	STP Effluent
Collector:	Client	Vol. Recv.:	

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Mercury Analysis-CVAA</b>											
EPA 1631 Low Level Mercury Analysis "As Received"											
Mercury		42.8		2.00	5.00		ng/L		10 ETL	03/28/11	0830 1081452

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 1631E	

Outfall 001  
Sampled 3/7/11

**GEL LABORATORIES LLC**  
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**Certificate of Analysis**

Report Date: March 30, 2011

Company : Brookhaven National Laboratory  
Address : Building 462

Contact: Upton, New York 11973-5000  
Project: Mr. John Burke  
Project: ES SPDES - Summary

Client Sample ID:	31025-001	Project:	BRKL00604
Sample ID:	273701001	Client ID:	BRKL006
Matrix:	W	COC:	31025
Collect Date:	09-MAR-11 11:00	Samp Recv.:	
Receive Date:	10-MAR-11 09:00	Client Desc.:	STP Effluent
Collector:	Client	Vol. Recv.:	

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Mercury Analysis-CVAA</b>											
7470 Cold Vapor Hg Liquid "As Received"											
Mercury	U	ND	0.066	0.200	ug/L	I	JXL	03/22/11	0945	1082148	I
<b>Metals Analysis-ICP</b>											
6010 TAL Metals Liquid "As Received"											
Aluminum	U	ND	68.0	200	ug/L	I	CYL	03/16/11	1732	1082082	2
Antimony	U	ND	3.50	60.0	ug/L	I					
Barium	J	20.8	1.00	200	ug/L	I					
Beryllium	U	ND	1.00	5.00	ug/L	I					
Cadmium	U	ND	1.00	5.00	ug/L	I					
Calcium		14600	50.0	5000	ug/L	I					
Chromium	J	1.39	1.00	10.0	ug/L	I					
Cobalt	U	ND	1.00	50.0	ug/L	I					
Copper		30.9	3.00	25.0	ug/L	I					
Iron		176	30.0	100	ug/L	I					
Magnesium	J	3700	110	5000	ug/L	I					
Manganese	J	2.16	2.00	15.0	ug/L	I					
Nickel	J	3.44	1.50	40.0	ug/L	I					
Potassium		6220	50.0	5000	ug/L	I					
Silver	J	2.33	1.00	10.0	ug/L	I					
Sodium		45500	100	5000	ug/L	I					
Tin	U	ND	2.50	10.0	ug/L	I					
Vanadium	J	1.86	1.00	50.0	ug/L	I					
Zinc		66.3	3.30	20.0	ug/L	I					
<b>Metals Analysis-ICP-MS</b>											
3005/6020 Arsenic "As Received"											
Lead	J	2.03	0.500	10.0	ug/L	I	BAJ	03/17/11	2211	1082079	3
Thallium	U	ND	0.450	20.0	ug/L	I					
Arsenic	U	ND	1.70	15.0	ug/L	I	BAJ	03/21/11	1614	1082079	4
Selenium	U	ND	1.50	15.0	ug/L	I					
<b>Nutrient Analysis</b>											
EPA 365.4 Phosphorus, Total in "As Received"											
Phosphorus, Total as P		1.34	0.015	0.050	mg/L	I	SDS	03/16/11	1142	1082190	5
<b>Semi-Volatile-GC/MS</b>											
3510C/8270C BNA Liquid "As Received"											
1,2,4-Trichlorobenzene	U	ND	2.00	10.0	ug/L	I	AGS	03/14/11	2243	1082387	6
1,2-Dichlorobenzene	U	ND	2.00	10.0	ug/L	I					
1,3-Dichlorobenzene	U	ND	2.00	10.0	ug/L	I					

Outfall 001  
 Sampled 3/9/11  
 24 hour  
 Composite

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: March 30, 2011

Company : Brookhaven National Laboratory  
Address : Building 462

Contact: Upton, New York 11973-5000  
Project: Mr. John Burke  
ES SPDES - Summary

Client Sample ID: 31025-001  
Sample ID: 273701001

Project: BRKL00604  
Client ID: BRKL006

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Semi-Volatile-GC/MS</b>											
3510C/8270C BNA Liquid "As Received"											
Indeno(1,2,3-cd)pyrene	U	ND	0.200	10.0	ug/L	1					
Isophorone	U	ND	3.00	10.0	ug/L	1					
N-Methyl-N-nitrosomethylamine	U	ND	2.00	10.0	ug/L	1					
N-Nitrosodipropylamine	U	ND	2.00	10.0	ug/L	1					
Naphthalene	U	ND	0.300	10.0	ug/L	1					
Nitrobenzene	U	ND	3.00	10.0	ug/L	1					
Pentachlorophenol	U	ND	2.00	50.0	ug/L	1					
Phenanthrene	U	ND	0.200	10.0	ug/L	1					
Phenol	U	ND	1.00	10.0	ug/L	1					
Pyrene	U	ND	0.300	10.0	ug/L	1					
bis(2-Chloroethoxy)methane	U	ND	3.00	10.0	ug/L	1					
bis(2-Chloroethyl) ether	U	ND	2.00	10.0	ug/L	1					
bis(2-Chloroisopropyl)ether	U	ND	2.00	10.0	ug/L	1					
bis(2-Ethylhexyl)phthalate	U	ND	2.00	10.0	ug/L	1					
<b>Semi-Volatiles-HERB</b>											
8151A Herbicide H2O% "As Received"											
2,4,5-TP	U	ND	0.0822	0.248	ug/L	1	TXK2	03/15/11	0000	1082523	7
2,4-D	U	ND	0.0822	0.248	ug/L	1					
2,4,5-T	J	0.131	0.0822	0.248	ug/L	1	TXK2	03/15/11	0000	1082523	8
<b>Solids Analysis</b>											
SM 2540D Total Suspended Liq "As Received"											
Total Suspended Solids	U	ND	0.570	2.50	mg/L		LYGI	03/11/11	1053	1082300	9

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid PR	AXS5	03/15/11	1400	1082189
SW846 3005A	ICP-MS 3005 PREP	LYHI	03/16/11	0920	1082078
SW846 3005A	ICP-TRACE SW846 3005A	LYHI	03/16/11	0920	1082081
SW846 3510C	3510C BNA Liq, Prep-8270 Analysis	VYQI	03/11/11	2146	1082386
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	TXB3	03/18/11	1205	1082147
SW846 8151A	8151A Herbicide Prep	JXC7	03/14/11	1528	1082522

The following Analytical Methods were performed

Method	Description	Analyst Comments
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**GEL LABORATORIES LLC**  
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**Certificate of Analysis**

Report Date: March 30, 2011

Company : Brookhaven National Laboratory  
Address : Building 462

Contact: Upton, New York 11973-5000  
Mr. John Burke  
Project: ES SPDES - Summary

Client Sample ID: 31025-002  
Sample ID: 273701002  
Matrix: W  
Collect Date: 09-MAR-11 11:10  
Receive Date: 10-MAR-11 09:00  
Collector: Client

Project: BRKL00604  
Client ID: BRKL006  
COC: 31025  
Samp Recv.:  
Client Desc.: STP Effluent  
Vol. Recv.:

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<b>SW9012A Cyanide, Total "As Received"</b>											
Cyanide, Total	U	ND		1.70	5.00	ug/L	I	SDS	03/15/11	0827	1082259
Semi-Volatiles-Pesticide											I
<b>608/3510C Pest/PCB Liquid Fed "As Received"</b>											
4,4'-DDD	U	ND		0.00194	0.00777	ug/L	2	RXEI	03/22/11	2020	1082361
4,4'-DDE	U	ND		0.000971	0.00777	ug/L	2				
4,4'-DDT	U	ND		0.00194	0.00777	ug/L	2				
Aldrin	U	ND		0.000971	0.00388	ug/L	2				
Aroclor-1016	U	ND		0.0323	0.0971	ug/L	2				
Aroclor-1221	U	ND		0.0323	0.0971	ug/L	2				
Aroclor-1232	U	ND		0.0323	0.0971	ug/L	2				
Aroclor-1242	U	ND		0.0323	0.0971	ug/L	2				
Aroclor-1248	U	ND		0.0323	0.0971	ug/L	2				
Aroclor-1254	U	ND		0.0323	0.0971	ug/L	2				
Aroclor-1260	U	ND		0.0323	0.0971	ug/L	2				
Chlordane (tech.)	U	ND		0.0149	0.0485	ug/L	2				
Dieldrin	U	ND		0.00194	0.00777	ug/L	2				
Endosulfan I	U	ND		0.000971	0.00388	ug/L	2				
Endosulfan II	U	ND		0.00194	0.00777	ug/L	2				
Endosulfan sulfate	U	ND		0.00194	0.00777	ug/L	2				
Endrin	U	ND		0.00194	0.00777	ug/L	2				
Endrin aldehyde	U	ND		0.000971	0.00777	ug/L	2				
Heptachlor	U	ND		0.000971	0.00388	ug/L	2				
Heptachlor epoxide	U	ND		0.000971	0.00388	ug/L	2				
Toxaphene	U	ND		0.0291	0.0971	ug/L	2				
alpha-BHC	U	ND		0.000971	0.00388	ug/L	2				
beta-BHC	U	ND		0.00117	0.00388	ug/L	2				
gamma-BHC (Lindane)	U	ND	0.00971	0.00388	ug/L	2					
delta-BHC		0.0271		0.000971	0.00388	ug/L	2	RXEI	03/22/11	2020	1082361
4,4'-DDD	Uh	ND		0.00194	0.00777	ug/L	2	RXEI	03/22/11	2221	1083705
4,4'-DDE	Uh	ND		0.000971	0.00777	ug/L	2				
4,4'-DDT	Uh	ND		0.00194	0.00777	ug/L	2				
Aldrin	Uh	ND		0.000971	0.00388	ug/L	2				
Aroclor-1016	Uh	ND		0.0323	0.0971	ug/L	2				
Aroclor-1221	Uh	ND		0.0323	0.0971	ug/L	2				
Aroclor-1232	Uh	ND		0.0323	0.0971	ug/L	2				
Aroclor-1242	Uh	ND		0.0323	0.0971	ug/L	2				
Aroclor-1248	Uh	ND		0.0323	0.0971	ug/L	2				

Outfall 001  
3/9/11  
Grab

**GEL LABORATORIES LLC**  
 2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: March 30, 2011

Company : Brookhaven National Laboratory  
 Address : Building 462

Contact: Upton, New York 11973-5000  
 Project: Mr. John Burke  
 ES SPDES - Summary

Client Sample ID: 31025-002  
 Sample ID: 273701002

Project: BRKL00604  
 Client ID: BRKL006

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Volatile Organics</b>											
<b>EPA 624 Method List "As Received"</b>											
Bromomethane	U	ND	0.300	1.00	ug/L	1					
Carbon tetrachloride	U	ND	0.300	1.00	ug/L	1					
Chlorobenzene	U	ND	0.250	1.00	ug/L	1					
Chloroethane	U	ND	0.300	1.00	ug/L	1					
Chloroform	U	ND	0.250	1.00	ug/L	1					
Chloromethane	U	ND	0.300	1.00	ug/L	1					
Dibromochloromethane	U	ND	0.300	1.00	ug/L	1					
Ethylbenzene	U	ND	0.250	1.00	ug/L	1					
Methylene chloride	U	ND	2.00	2.00	ug/L	1					
Tetrachloroethylene	U	ND	0.300	1.00	ug/L	1					
Toluene	U	ND	0.250	1.00	ug/L	1					
Trichloroethylene	U	ND	0.250	1.00	ug/L	1					
Trichlorofluoromethane	U	ND	0.300	1.00	ug/L	1					
Vinyl chloride	U	ND	0.500	1.00	ug/L	1					
cis-1,3-Dichloropropylene	U	ND	0.250	1.00	ug/L	1					
tert-Butyl methyl ether	U	ND	0.250	5.00	ug/L	1					
trans-1,2-Dichloroethylene	U	ND	0.300	1.00	ug/L	1					
trans-1,3-Dichloropropylene	U	ND	0.250	1.00	ug/L	1					

*Outfall 001*  
*3/9/11*  
*Grab*

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3510C	3510C-608 PEST/PCB Prep Liquid	RXC1	03/11/11	1245	1082359
SW846 3510C	3510C-608 PEST/PCB Prep Liquid	SXC2	03/17/11	1447	1083704
SW846 9010B Prep	SW846 9010B Prep	AXS5	03/14/11	1437	1082256

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	SW846 9012A	
2	EPA 608	
3	EPA 608	
4	EPA 608	
5	EPA 608	
6	EPA 624	

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: March 30, 2011

Company : Brookhaven National Laboratory  
Address : Building 462

Contact: Upton, New York 11973--5000  
Mr. John Burke  
Project: ES SPDES - Summary

Client Sample ID: 31025-003  
Sample ID: 273701003  
Matrix: W  
Collect Date: 09-MAR-11 11:40  
Receive Date: 10-MAR-11 09:00  
Collector: Client

Project: BRKL00604  
Client ID: BRKL006  
COC: 31025  
Samp Recv.:  
Client Desc.: STP Influent  
Vol. Recv.:

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Mercury Analysis-CVAA</b>											
7470 Cold Vapor Hg Liquid "As Received"											
Mercury	U	ND	0.066	0.200	ug/L	1	JXLI	03/22/11	0953	1082148	1
<b>Metals Analysis-ICP</b>											
6010 TAL Metals Liquid "As Received"											
Aluminum		520	68.0	200	ug/L	1	CYLI	03/16/11	1743	1082082	2
Antimony	U	ND	3.50	60.0	ug/L	1					
Barium	J	89.1	1.00	200	ug/L	1					
Beryllium	U	ND	1.00	5.00	ug/L	1					
Cadmium	J	1.95	1.00	5.00	ug/L	1					
Calcium		23200	50.0	5000	ug/L	1					
Chromium	J	3.58	1.00	10.0	ug/L	1					
Cobalt	J	2.68	1.00	50.0	ug/L	1					
Copper		101	3.00	25.0	ug/L	1					
Iron		1620	30.0	100	ug/L	1					
Magnesium		6060	110	5000	ug/L	1					
Manganese		35.5	2.00	15.0	ug/L	1					
Nickel	J	10.9	1.50	40.0	ug/L	1					
Potassium		6960	50.0	5000	ug/L	1					
Silver	J	2.39	1.00	10.0	ug/L	1					
Sodium		60000	100	5000	ug/L	1					
Tin	U	ND	2.50	10.0	ug/L	1					
Vanadium	J	14.6	1.00	50.0	ug/L	1					
Zinc		138	3.30	20.0	ug/L	1					
<b>Metals Analysis-ICP-MS</b>											
3005/6020 Arsenic "As Received"											
Lead		16.4	0.500	10.0	ug/L	1	BAJ	03/17/11	2236	1082079	3
Thallium	U	ND	0.450	20.0	ug/L	1					
Arsenic	U	ND	1.70	15.0	ug/L	1	BAJ	03/21/11	1623	1082079	4
Selenium	U	ND	1.50	15.0	ug/L	1					
<b>Solids Analysis</b>											
SM 2540D Total Suspended Liq "As Received"											
Total Suspended Solids		92.0	5.70	25.0	mg/L		LYGI	03/11/11	1053	1082300	5

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
SW846 3005A	ICP-MS 3005 PREP	LYHI	03/16/11	0920	1082078

STP Influent  
3/9/11  
24 hour composite

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: March 30, 2011

Company : Brookhaven National Laboratory  
Address : Building 462

Contact: Upton, New York 11973-5000  
Project: Mr. John Burke  
Project: ES SPDES - Summary

Client Sample ID:	31025-002	Project:	BRKL00604
Sample ID:	273823001	Client ID:	BRKL006
Matrix:	W	COC:	31025
Collect Date:	09-MAR-11 11:10	Samp Recv.:	
Receive Date:	10-MAR-11 09:00	Client Desc.:	STP Effluent
Collector:	Client	Vol. Recv.:	

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis-CVAA											
EPA 1631 Low Level Mercury Analysis "As Received"											
Mercury		48.1	2.00	5.00	ng/L	10	ETL	03/29/11	0855	1082607	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 1631E	

Outfall 001  
sampled 3/9/11

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: April 1, 2011

Company : Brookhaven National Laboratory  
Address : Building 462

Contact: Upton, New York 11973-5000  
Project: Mr. John Burke  
Project: ES SPDES - Summary

Client Sample ID:	31033-001	Project:	BRKL00604
Sample ID:	273885001	Client ID:	BRKL006
Matrix:	w	COC:	31033
Collect Date:	11-MAR-11 10:00	Samp Recv.:	
Receive Date:	12-MAR-11 09:25	Client Desc.:	STP Effluent
Collector:	Client	Vol. Recv.:	

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Mercury Analysis-CVAA</b>											
7470 Cold Vapor Hg Liquid "As Received"											
Mercury	U	ND	0.066	0.200	ug/L	1	JXL	03/30/11	1253	1084073	1
<b>Metals Analysis-ICP</b>											
6010 TAL Metals Liquid "As Received"											
Aluminum	U	ND	68.0	200	ug/L	1	HSC	03/18/11	1018	1082908	2
Antimony	U	ND	3.50	60.0	ug/L	1					
Barium	J	25.2	1.00	200	ug/L	1					
Beryllium	U	ND	1.00	5.00	ug/L	1					
Cadmium	U	ND	1.00	5.00	ug/L	1					
Calcium	I	7400	50.0	5000	ug/L	1					
Chromium	U	ND	1.00	10.0	ug/L	1					
Cobalt	J	1.23	1.00	50.0	ug/L	1					
Copper		31.9	3.00	25.0	ug/L	1					
Iron		188	30.0	100	ug/L	1					
Magnesium	J	4280	110	5000	ug/L	1					
Manganese	U	ND	2.00	15.0	ug/L	1					
Nickel	J	3.25	1.50	40.0	ug/L	1					
Potassium		7430	50.0	5000	ug/L	1					
Silver	J	1.25	1.00	10.0	ug/L	1					
Sodium		50300	100	5000	ug/L	1					
Tin	U	ND	2.50	10.0	ug/L	1					
Vanadium	J	1.39	1.00	50.0	ug/L	1					
Zinc		60.3	3.30	20.0	ug/L	1					
<b>Metals Analysis-ICP-MS</b>											
3005/6020 Arsenic "As Received"											
Arsenic	U	ND	1.70	15.0	ug/L	1	BAJ	03/24/11	1706	1082903	3
Lead	J	2.40	0.500	10.0	ug/L	1					
Selenium	U	ND	1.50	15.0	ug/L	1					
Thallium	U	ND	0.450	20.0	ug/L	1					
<b>Nutrient Analysis</b>											
EPA 365.4 Phosphorus, Total in "As Received"											
Phosphorus, Total as P		1.44	0.015	0.050	mg/L	1	KLPI	03/18/11	1522	1083818	4
<b>Semi-Volatile-GC/MS</b>											
3510C/8270C BNA Liquid "As Received"											
1,2,4-Trichlorobenzene	U	ND	1.92	10.0	ug/L	1	JMB3	03/18/11	1353	1083822	5
1,2-Dichlorobenzene	U	ND	1.92	10.0	ug/L	1					
1,3-Dichlorobenzene	U	ND	1.92	10.0	ug/L	1					

outfall 001  
sampled 3/11/11  
24 hour  
composite

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: April 1, 2011

Company : Brookhaven National Laboratory  
Address : Building 462

Contact: Upton, New York 11973-5000  
Project: Mr. John Burke  
ES SPDES - Summary

Client Sample ID: 31033-001  
Sample ID: 273885001

Project: BRKL00604  
Client ID: BRKL006

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Semi-Volatile-GC/MS</b>											
3510C/8270C BNA Liquid "As Received"											
Indeno(1,2,3-cd)pyrene	U	ND	0.192	10.0	ug/L	1					
Isophorone	U	ND	2.88	10.0	ug/L	1					
N-Methyl-N-nitrosomethylamine	U	ND	1.92	10.0	ug/L	1					
N-Nitrosodipropylamine	U	ND	1.92	10.0	ug/L	1					
Naphthalene	U	ND	0.288	10.0	ug/L	1					
Nitrobenzene	U	ND	2.88	10.0	ug/L	1					
Pentachlorophenol	U	ND	1.92	50.0	ug/L	1					
Phenanthrene	U	ND	0.192	10.0	ug/L	1					
Phenol	U	ND	0.962	10.0	ug/L	1					
Pyrene	U	ND	0.288	10.0	ug/L	1					
bis(2-Chloroethoxy)methane	U	ND	2.88	10.0	ug/L	1					
bis(2-Chloroethyl) ether	U	ND	1.92	10.0	ug/L	1					
bis(2-Chloroisopropyl)ether	U	ND	1.92	10.0	ug/L	1					
bis(2-Ethylhexyl)phthalate	U	ND	1.92	10.0	ug/L	1					
<b>Semi-Volatiles-HERB</b>											
8151A Herbicide H2O% "As Received"											
2,4,5-TP	U	ND	0.0874	0.263	ug/L	1	TXK2	03/24/11	0118	1083813	6
2,4-D	U	ND	0.0874	0.263	ug/L	1					
2,4,5-T	J	0.128	0.0874	0.263	ug/L	1	TXK2	03/24/11	0118	1083813	7
<b>Solids Analysis</b>											
SM 2540D Total Suspended Liq "As Received"											
Total Suspended Solids	U	ND	0.570	2.50	mg/L		LYG1	03/16/11	1339	1083636	8

The following Prep Methods were performed

Method	Description	Analyst	Date	Time	Prep Batch
EPA 365.4 Prep	EPA 365.4 Phosphorus, Total in liquid PR	AXS5	03/17/11	1700	1083817
SW846 3005A	ICP-MS 3005 PREP	LYH1	03/17/11	0830	1082901
SW846 3005A	ICP-TRACE SW846 3005A	LYH1	03/17/11	0830	1082907
SW846 3510C	3510C BNA Liq. Prep-8270 Analysis	AXW1	03/17/11	2247	1083821
SW846 7470A Prep	EPA 7470A Mercury Prep Liquid	TXB3	03/29/11	1315	1084072
SW846 8151A	8151A Herbicide Prep	AXW1	03/17/11	2219	1083812

The following Analytical Methods were performed

Method	Description	Analyst Comments
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**GEL LABORATORIES LLC**  
 2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: April 1, 2011

Company : Brookhaven National Laboratory  
 Address : Building 462

Contact: Upton, New York 11973--5000  
 Project: Mr. John Burke  
 ES SPDES - Summary

Client Sample ID: 31033-002  
 Sample ID: 273885002  
 Matrix: w  
 Collect Date: 11-MAR-11 11:10  
 Receive Date: 12-MAR-11 09:25  
 Collector: Client

Project: BRKL00604  
 Client ID: BRKL006  
 COC: 31033  
 Samp Recv.:  
 Client Desc.: STP Effluent  
 Vol. Recv.:

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Flow Injection Analysis</b>											
<b>SW9012A Cyanide, Total "As Received"</b>											
Cyanide, Total	U	ND		1.70	5.00	ug/L	I	SDS	03/17/11	0846	1083426
<b>Semi-Volatiles-Pesticide</b>											
<b>608/3510C Pest/PCB Liquid Fed "As Received"</b>											
4,4'-DDD	U	ND		0.00099	0.00396	ug/L	I	RXE1	03/22/11	2238	1083705
4,4'-DDE	U	ND		0.000495	0.00396	ug/L	I				
4,4'-DDT	U	ND		0.00099	0.00396	ug/L	I				
Aldrin	U	ND		0.000495	0.00198	ug/L	I				
Aroclor-1016	U	ND		0.0165	0.065	ug/L	I				
Aroclor-1221	U	ND		0.0165	0.065	ug/L	I				
Aroclor-1232	U	ND		0.0165	0.065	ug/L	I				
Aroclor-1242	U	ND		0.0165	0.065	ug/L	I				
Aroclor-1248	U	ND		0.0165	0.065	ug/L	I				
Aroclor-1254	U	ND		0.0165	0.065	ug/L	I				
Aroclor-1260	U	ND		0.0165	0.065	ug/L	I				
Chlordane (tech.)	U	ND		0.00757	0.0248	ug/L	I				
Dieldrin	U	ND		0.00099	0.00396	ug/L	I				
Endosulfan I	U	ND		0.000495	0.00198	ug/L	I				
Endosulfan II	U	ND		0.00099	0.00396	ug/L	I				
Endosulfan sulfate	U	ND		0.00099	0.00396	ug/L	I				
Endrin	U	ND		0.00099	0.00396	ug/L	I				
Endrin aldehyde	U	ND		0.000495	0.00396	ug/L	I				
Heptachlor	U	ND		0.000495	0.00198	ug/L	I				
Heptachlor epoxide	U	ND		0.000495	0.00198	ug/L	I				
Toxaphene	U	ND		0.0149	0.0495	ug/L	I				
alpha-BHC	U	ND		0.000495	0.00198	ug/L	I				
beta-BHC	U	ND		0.000594	0.00198	ug/L	I				
gamma-BHC (Lindane)	U	ND		0.000495	0.00198	ug/L	I				
delta-BHC		0.027		0.000495	0.00198	ug/L	I	RXE1	03/22/11	2238	1083705
<b>Volatile Organics</b>											
<b>EPA 624 Method List "As Received"</b>											
1,1,1-Trichloroethane	U	ND		0.325	1.00	ug/L	I	SYK1	03/17/11	2141	1084023
1,1,2,2-Tetrachloroethane	U	ND		0.250	1.00	ug/L	I				
1,1,2-Trichloroethane	U	ND		0.250	1.00	ug/L	I				
1,1-Dichloroethane	U	ND		0.300	1.00	ug/L	I				
1,1-Dichloroethylene	U	ND		0.300	1.00	ug/L	I				
1,2-Dichlorobenzene	U	ND		0.250	1.00	ug/L	I				
1,2-Dichloroethane	U	ND		0.250	1.00	ug/L	I				

Outfall 001  
 3/11/11  
 Grab

**GEL LABORATORIES LLC**  
 2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: April 1, 2011

Company : Brookhaven National Laboratory  
 Address : Building 462

Contact: Upton, New York 11973-5000  
 Project: Mr. John Burke  
 ES SPDES - Summary

Client Sample ID: 31033-002  
 Sample ID: 273885002

Project: BRKL00604  
 Client ID: BRKL006

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>The following Analytical Methods were performed</b>											
Method	Description									Analyst Comments	
1	SW846 9012A										
2	EPA 608										
3	EPA 608										
4	EPA 624										
Surrogate/Tracer recovery	Test						Result	Nominal	Recovery%	Acceptable Limits	
4cmx		608/3510C Pest/PCB Liquid Fed "As Received"			0.0754 ug/L		0.099	76.2		(30%-111%)	
Decachlorobiphenyl		608/3510C Pest/PCB Liquid Fed "As Received"			0.0558 ug/L		0.099	56.3		(30%-124%)	
1,2-Dichloroethane-d4		EPA 624 Method List "As Received"			53.0 ug/L		50.0	106		(71%-130%)	
Bromofluorobenzene		EPA 624 Method List "As Received"			50.3 ug/L		50.0	101		(80%-120%)	
Toluene-d8		EPA 624 Method List "As Received"			54.1 ug/L		50.0	108		(80%-120%)	

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: March 30, 2011

Company : Brookhaven National Laboratory  
Address : Building 462

Contact: Upton, New York 11973--5000  
Project: Mr. John Burke  
Project: ES SPDES - Summary

Client Sample ID:	31033-002	Project:	BRKL00604
Sample ID:	273880001	Client ID:	BRKL006
Matrix:	W	COC:	31033
Collect Date:	11-MAR-11 10:10	Samp Recv.:	
Receive Date:	12-MAR-11 09:17	Client Desc.:	STP Effluent
Collector:	Client	Vol. Recv.:	

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
Mercury Analysis-CVAA											
EPA 1631 Low Level Mercury Analysis "As Received"											
Mercury		47.5	2.00	5.00	ng/L	10	ETL	03/30/11	0720	1083081	1

The following Analytical Methods were performed.

Method	Description	Analyst Comments
1	EPA 1631E	

Oatfall 001  
Sampled 3/11/11

# **CHEMTEX**

Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642 • (409) 983-4575 FAX (409) 982-1522  
5544 Leopard Street, Corpus Christi, Texas 78408 • (361) 299-9900 FAX (361) 299-1155  
138 S. Cities Service Hwy., Sulphur, Louisiana 70663 • (337) 626-2121 FAX (337) 626-2126

Client: Brookhaven National Laboratory  
Safety & Environmental Protection Division  
Bldg. 535A  
Upton, NY 11973-5000

Attn: Mr. B. Lee  
Phone: 1-631-344-3148  
E-mail: blee@bnl.gov

Reporting Date: 03/17/11  
Sample Matrix: Water  
Date Collected: 03/07/11  
Time Collected: See Below  
Collected by: Client  
Date Received: 03/08/11  
Time Received: 10:20am  
CHEMTEX File #: P11030353

**RESULTS OF ANALYSIS**  
PROJECT NAME: ES SPDES  
CHAIN OF CUSTODY NO: 31015

CHEMTEX ID	Sample ID	Parameter	Units	Results	RL	Qual
P11030353	STP Effluent (11:00)	HEDP as Organic Phosphorus	mg/l	<0.05	0.05	
		Inorganic Phosphorus	mg/l	1.23	0.25	
		Total Phosphorus	mg/l	1.34	0.25	
		Tolytriazole(TTA)	mg/l	<0.005	0.005	
P11030354	FB-1 (10:00)	HEDP as Organic Phosphorus	mg/l	<0.05	0.05	
		Inorganic Phosphorus	mg/l	<0.05	0.05	
		Total Phosphorus	mg/l	<0.05	0.05	
		Tolytriazole(TTA)	mg/l	<0.005	0.005	

RL: Reporting Limit.

Qualifier Definition:

**LABORATORY QUALITY CONTROL DATA**  
Method References/Analysis Dates & Analysts

Parameter	Method Reference	Date Analyzed/Analyzed By
Phosphorus	EPA Method 365.3	03/09/11 YS
Tolytriazole(TTA)	SOP#: O121-049	03/08/11 SPR

Outfall 001  
Sampled 3/7/11

**NOTICE/DISCLAIMER:** The analytical results, opinions or interpretations contained in this report are based upon information and material supplied by the client for whose exclusive and confidential use this report has been made. No person or entity other than the client may rely on this report. Any such reliance will be unjustified. Any person other than the client, that reads this report does so at his or her own risk. The analytical results, opinions and/or interpretations expressed herein represent the best judgement of Chemtex, based on the information and instructions received from the client. Chemtex makes no warranty or representation, express or implied, of any type, and expressly disclaims same. This report shall not be reproduced, in whole or in part, without the written approval of Chemtex. In no event shall Chemtex be responsible for any damage greater than the amount it received for the analysis performed.

**ATTACHMENT IV**

**BROOKHAVEN NATIONAL LABORATORY**

**SPDES PERMIT NO. NY0005835**

**DISCHARGE MONITORING REPORT FOR MARCH 2011**

**ANALYTICAL RESULTS FROM H2M LABS INC.,**

**GENERAL ENGINEERING LABORATORIES, LLC,**

**AND CHEMTEX, ENVIRONMENTAL LABORATORY, INC.**

**FOR REGULATORY COMPLIANCE SAMPLES COLLECTED FROM**

**OUTFALLS 001A, 001B, 001F, 002, 002B, 005, 006A, 006B, 008, AND 010**

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

SDG Number:	271040	Date Collected:	01/24/2011 13:50	Matrix:	W
Lab Sample ID:	271040001	Date Received:	01/26/2011 09:15		
Client Sample:	535-PCB	Client:	BRKL006	Project:	BRKL00604
Client ID:	30901-001	Method:	EPA 625	SOP Ref:	GL-OA-E-009
Batch ID:	1068648	Inst:	MSD4.1	Dilution:	1
Run Date:	01/28/2011 13:23	Analyst:	JMB3	Inj. Vol:	1 uL
Prep Date:	01/27/2011 19:38	Aliquot:	1000 mL	Final Volume:	1 mL
Data File:	S012811.B\w4u2810.D	Column:	DB-5ms		

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	RDL
62-75-9	N-Methyl-N-nitrosomethylamine	U	10.0	ug/L	2.00	10.0	10.0
108-95-2	Phenol	U	10.0	ug/L	1.00	10.0	10.0
111-44-4	bis(2-Chloroethyl) ether	U	10.0	ug/L	2.00	10.0	10.0
95-57-8	2-Chlorophenol	U	10.0	ug/L	2.00	10.0	10.0
541-73-1	1,3-Dichlorobenzene	U	10.0	ug/L	2.00	10.0	10.0
106-46-7	1,4-Dichlorobenzene	U	10.0	ug/L	2.00	10.0	10.0
95-50-1	1,2-Dichlorobenzene	U	10.0	ug/L	2.00	10.0	10.0
108-60-1	bis(2-Chloroisopropyl)ether	U	10.0	ug/L	2.00	10.0	10.0
621-64-7	N-Nitrosodipropylamine	U	10.0	ug/L	2.00	10.0	10.0
67-72-1	Hexachloroethane	U	10.0	ug/L	2.00	10.0	10.0
98-95-3	Nitrobenzene	U	10.0	ug/L	3.00	10.0	10.0
78-59-1	Isophorone	U	10.0	ug/L	3.00	10.0	10.0
88-75-5	2-Nitrophenol	U	10.0	ug/L	2.00	10.0	10.0
105-67-9	2,4-Dimethylphenol	U	10.0	ug/L	2.00	10.0	10.0
111-91-1	bis(2-Chloroethoxy)methane	U	10.0	ug/L	3.00	10.0	10.0
120-83-2	2,4-Dichlorophenol	U	10.0	ug/L	2.00	10.0	10.0
87-68-3	Hexachlorobutadiene	U	10.0	ug/L	2.00	10.0	10.0
59-50-7	4-Chloro-3-methylphenol	U	10.0	ug/L	2.00	10.0	10.0
91-20-3	Naphthalene	U	1.00	ug/L	0.300	1.00	10.0
77-47-4	Hexachlorocyclopentadiene	U	10.0	ug/L	3.00	10.0	10.0
88-06-2	2,4,6-Trichlorophenol	U	10.0	ug/L	2.00	10.0	10.0
91-58-7	2-Chloronaphthalene	U	1.00	ug/L	0.300	1.00	10.0
131-11-3	Dimethylphthalate	U	10.0	ug/L	2.00	10.0	10.0
606-20-2	2,6-Dinitrotoluene	U	10.0	ug/L	2.00	10.0	10.0
121-14-2	2,4-Dinitrotoluene	U	10.0	ug/L	2.00	10.0	10.0
208-96-8	Acenaphthylene	U	1.00	ug/L	0.200	1.00	10.0
83-32-9	Acenaphthene	U	1.00	ug/L	0.310	1.00	10.0
51-28-5	2,4-Dinitrophenol	U	20.0	ug/L	5.00	20.0	50.0
84-66-2	Diethylphthalate	U	10.0	ug/L	2.00	10.0	10.0
100-02-7	4-Nitrophenol	U	10.0	ug/L	2.00	10.0	50.0
86-73-7	Fluorene	U	1.00	ug/L	0.200	1.00	10.0
7005-72-3	4-Chlorophenylphenylether	U	10.0	ug/L	2.00	10.0	10.0
534-52-1	2-Methyl-4,6-dinitrophenol	U	10.0	ug/L	3.00	10.0	50.0
122-39-4	Diphenylamine	U	10.0	ug/L	3.00	10.0	10.0
101-55-3	4-Bromophenylphenylether	U	10.0	ug/L	2.00	10.0	10.0
118-74-1	Hexachlorobenzene	U	10.0	ug/L	2.00	10.0	10.0
87-86-5	Pentachlorophenol	U	10.0	ug/L	2.00	10.0	50.0
85-01-8	Phenanthrene	U	1.00	ug/L	0.200	1.00	10.0

Building 535 PCB Lab

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 2 of 2

SDG Number:	271040	Date Collected:	01/24/2011 13:50	Matrix:	W
Lab Sample ID:	271040001	Date Received:	01/26/2011 09:15		
Client Sample:	535-PCB	Client:	BRKL006	Project:	BRKL00604
Client ID:	30901-001	Method:	EPA 625	SOP Ref:	GL-OA-E-009
Batch ID:	1068648	Inst:	MSD4.I	Dilution:	1
Run Date:	01/28/2011 13:23	Analyst:	JMB3	Inj. Vol:	1 uL
Prep Date:	01/27/2011 19:38	Aliquot:	1000 mL	Final Volume:	1 mL
Data File:	S012811.B\s4a2810.D	Column:	DB-5ms		

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	RDL
120-12-7	Anthracene	U	1.00	ug/L	0.200	1.00	10.0
84-74-2	Di-n-butylphthalate	U	10.0	ug/L	2.00	10.0	10.0
206-44-0	Fluoranthene	U	1.00	ug/L	0.200	1.00	10.0
129-00-0	Pyrene	U	1.00	ug/L	0.300	1.00	10.0
85-68-7	Butylbenzylphthalate	U	10.0	ug/L	2.00	10.0	10.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	10.0	ug/L	2.00	10.0	10.0
56-55-3	Benzo(a)anthracene	U	1.00	ug/L	0.200	1.00	10.0
218-01-9	Chrysene	U	1.00	ug/L	0.200	1.00	10.0
117-84-0	Di-n-octylphthalate	U	10.0	ug/L	3.00	10.0	10.0
205-99-2	Benzo(b)fluoranthene	U	1.00	ug/L	0.200	1.00	10.0
207-08-9	Benzo(k)fluoranthene	U	1.00	ug/L	0.200	1.00	10.0
50-32-8	Benzo(a)pyrene	U	1.00	ug/L	0.200	1.00	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	1.00	ug/L	0.200	1.00	10.0
53-70-3	Dibenzo(a,h)anthracene	U	1.00	ug/L	0.200	1.00	10.0
191-24-2	Benzo(ghi)perylene	U	1.00	ug/L	0.200	1.00	10.0
91-94-1	3,3'-Dichlorobenzidine	U	10.0	ug/L	2.00	10.0	40.0
120-82-1	1,2,4-Trichlorobenzene	U	10.0	ug/L	2.00	10.0	10.0

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 2 of 2

SDG Number:	271040	Date Collected:	01/24/2011 00:00	Matrix:	W
Lab Sample ID:	271040002	Date Received:	01/26/2011 09:15		
Client Sample:	BD-1	Client:	BRKL006	Project:	BRKL00604
Client ID:	30901-002	Method:	EPA 625	SOP Ref:	GL-OA-E-009
Batch ID:	1068648	Inst:	MSD4.I	Dilution:	1
Run Date:	01/28/2011 14:41	Analyst:	JMB3	Inj. Vol:	1 uL
Prep Date:	01/27/2011 19:38	Alliquot:	1040 mL	Final Volume:	1 mL
Data File:	S012811.B\4a2813.D	Column:	DB-5ms		

CAS No.	Paramname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	RDL
120-12-7	Anthracene	U	0.962	ug/L	0.192	0.962	10.0
84-74-2	Di-n-butylphthalate	U	9.62	ug/L	1.92	9.62	10.0
206-44-0	Fluoranthene	U	0.962	ug/L	0.192	0.962	10.0
129-00-0	Pyrene	U	0.962	ug/L	0.288	0.962	10.0
85-68-7	Butylbenzylphthalate	U	9.62	ug/L	1.92	9.62	10.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	9.62	ug/L	1.92	9.62	10.0
56-55-3	Benzo(a)anthracene	U	0.962	ug/L	0.192	0.962	10.0
218-01-9	Chrysene	U	0.962	ug/L	0.192	0.962	10.0
117-84-0	Di-n-octylphthalate	U	9.62	ug/L	2.88	9.62	10.0
205-99-2	Benzo(b)fluoranthene	U	0.962	ug/L	0.192	0.962	10.0
207-08-9	Benzo(k)fluoranthene	U	0.962	ug/L	0.192	0.962	10.0
50-32-8	Benzo(a)pyrene	U	0.962	ug/L	0.192	0.962	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	0.962	ug/L	0.192	0.962	10.0
53-70-3	Dibenzo(a,h)anthracene	U	0.962	ug/L	0.192	0.962	10.0
191-24-2	Benzo(ghi)perylene	U	0.962	ug/L	0.192	0.962	10.0
91-94-1	3,3'-Dichlorobenzidine	U	9.62	ug/L	1.92	9.62	40.0
120-82-1	1,2,4-Trichlorobenzene	U	9.62	ug/L	1.92	9.62	10.0

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 271040

METHOD TYPE: SW846

SAMPLE ID: 271040001

CLIENT ID: 30901-001

CONTRACT: BRKL00604

MATRIX:W

DATE RECEIVED 26-JAN-11

LEVEL: Low

%SOLIDS:

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7429-90-5	Aluminum	68	ug/L	U		P	68	1	OPTIMA4	020311A-1
7440-36-0	Antimony	3.5	ug/L	U		P	3.5	1	OPTIMA4	020311A-1
7440-38-2	Arsenic	1.7	ug/L	U		MS	1.7	1	ICPMS5	110222-3
7440-39-3	Barium	28.8	ug/L	B		P	1	1	OPTIMA4	020311A-1
7440-41-7	Beryllium	1	ug/L	U		P	1	1	OPTIMA4	020311A-1
7440-43-9	Cadmium	1	ug/L	U		P	1	1	OPTIMA4	020311A-1
7440-70-2	Calcium	8280	ug/L			P	50	1	OPTIMA4	020311A-1
7440-47-3	Chromium	1	ug/L	U		P	1	1	OPTIMA4	020311A-1
7440-48-4	Cobalt	1	ug/L	U		P	1	1	OPTIMA4	020311A-1
7440-50-8	Copper	82.4	ug/L			P	3	1	OPTIMA4	020311A-1
7439-89-6	Iron	65	ug/L	B		P	30	1	OPTIMA4	020311A-1
7439-92-1	Lead	18.8	ug/L			MS	0.5	1	ICPMS5	110222-3
7439-95-4	Magnesium	2850	ug/L	B		P	110	1	OPTIMA4	020311A-1
7439-96-5	Manganese	261	ug/L			P	2	1	OPTIMA4	020311A-1
7439-97-6	Mercury	0.066	ug/L	U		AV	0.066	1	HG3	020111W1-4
7440-02-0	Nickel	2.62	ug/L	B		P	1.5	1	OPTIMA4	020311A-1
7440-09-7	Potassium	1140	ug/L	B		P	50	1	OPTIMA4	020411-2
7782-49-2	Selenium	1.5	ug/L	U		MS	1.5	1	ICPMS5	110222-3
7440-22-4	Silver	1	ug/L	U		P	1	1	OPTIMA4	020311A-1
7440-23-5	Sodium	26400	ug/L			P	100	1	OPTIMA4	020311A-1
7440-28-0	Thallium	0.45	ug/L	U		MS	0.45	1	ICPMS5	110222-3
7440-31-5	Tin	38.9	ug/L			P	2.5	1	OPTIMA4	020311A-1
7440-62-2	Vanadium	1	ug/L	U		P	1	1	OPTIMA4	020311A-1
7440-66-6	Zinc	104	ug/L			P	3.3	1	OPTIMA4	020311A-1

Building 535 PCB Lab

1/24/11

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 271040

METHOD TYPE: SW846

SAMPLE ID: 271040002

CLIENT ID: 30901-002

CONTRACT: BRKL00604

MATRIX:W

DATE RECEIVED 26-JAN-11

LEVEL: Low

%SOLIDS:

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7429-90-5	Aluminum	68	ug/L	U	P		68	1	OPTIMA4	020311A-1
7440-36-0	Antimony	3.5	ug/L	U	P		3.5	1	OPTIMA4	020311A-1
7440-38-2	Arsenic	1.7	ug/L	U	MS		1.7	1	ICPMS5	110222-3
7440-39-3	Barium	27.7	ug/L	B	P		1	1	OPTIMA4	020311A-1
7440-41-7	Beryllium	1	ug/L	U	P		1	1	OPTIMA4	020311A-1
7440-43-9	Cadmium	1	ug/L	U	P		1	1	OPTIMA4	020311A-1
7440-70-2	Calcium	8140	ug/L		P		50	1	OPTIMA4	020311A-1
7440-47-3	Chromium	1	ug/L	U	P		1	1	OPTIMA4	020311A-1
7440-48-4	Cobalt	1	ug/L	U	P		1	1	OPTIMA4	020311A-1
7440-50-8	Copper	83.6	ug/L		P		3	1	OPTIMA4	020311A-1
7439-89-6	Iron	58.7	ug/L	B	P		30	1	OPTIMA4	020311A-1
7439-92-1	Lead	15.1	ug/L		MS		0.5	1	ICPMS5	110222-3
7439-95-4	Magnesium	2780	ug/L	B	P		110	1	OPTIMA4	020311A-1
7439-96-5	Manganese	271	ug/L		P		2	1	OPTIMA4	020311A-1
7439-97-6	Mercury	0.066	ug/L	U	AV		0.066	1	HG3	020111W1-4
7440-02-0	Nickel	9.18	ug/L	B	P		1.5	1	OPTIMA4	020311A-1
7440-09-7	Potassium	1060	ug/L	B	P		50	1	OPTIMA4	020411-2
7782-49-2	Selenium	1.5	ug/L	U	MS		1.5	1	ICPMS5	110222-3
7440-22-4	Silver	1	ug/L	U	P		1	1	OPTIMA4	020311A-1
7440-23-5	Sodium	25900	ug/L		P		100	1	OPTIMA4	020311A-1
7440-28-0	Thallium	0.45	ug/L	U	MS		0.45	1	ICPMS5	110222-3
7440-31-5	Tin	49.2	ug/L		P		2.5	1	OPTIMA4	020311A-1
7440-62-2	Vanadium	1	ug/L	U	P		1	1	OPTIMA4	020311A-1
7440-66-6	Zinc	165	ug/L		P		3.3	1	OPTIMA4	020311A-1

Building 535 PCB Lab  
 Blind Duplicate  
 1/24/11

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 2

SDG Number:	270848	Date Collected:	01/20/2011 11:15	Matrix:	W
Lab Sample ID:	270848001	Date Received:	01/21/2011 10:30		
Client Sample:	498-CF	Client:	BRKL006	Project:	BRKL00604
Client ID:	30893-001	Method:	EPA 625	SOP Ref:	GL-OA-E-009
Batch ID:	1067977	Inst:	MSD6.I	Dilution:	1
Run Date:	01/26/2011 14:12	Analyst:	JMB3	Inj. Vol:	1 uL
Prep Date:	01/25/2011 17:46	Aliquot:	1000 mL	Final Volume:	1 mL
Data File:	S012611.B\sa2611.D	Column:	DB-Sms		

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	RDL
62-75-9	N-Methyl-N-nitrosomethylamine	U	10.0	ug/L	2.00	10.0	10.0
108-95-2	Phenol	U	10.0	ug/L	1.00	10.0	10.0
111-44-4	bis(2-Chloroethyl) ether	U	10.0	ug/L	2.00	10.0	10.0
95-57-8	2-Chlorophenol	U	10.0	ug/L	2.00	10.0	10.0
541-73-1	1,3-Dichlorobenzene	U	10.0	ug/L	2.00	10.0	10.0
106-46-7	1,4-Dichlorobenzene	U	10.0	ug/L	2.00	10.0	10.0
95-50-1	1,2-Dichlorobenzene	U	10.0	ug/L	2.00	10.0	10.0
108-60-1	bis(2-Chloroisopropyl)ether	U	10.0	ug/L	2.00	10.0	10.0
621-64-7	N-Nitrosodipropylamine	U	10.0	ug/L	2.00	10.0	10.0
67-72-1	Hexachloroethane	U	10.0	ug/L	2.00	10.0	10.0
98-95-3	Nitrobenzene	U	10.0	ug/L	3.00	10.0	10.0
78-59-1	Isophorone	U	10.0	ug/L	3.00	10.0	10.0
88-75-5	2-Nitrophenol	U	10.0	ug/L	2.00	10.0	10.0
105-67-9	2,4-Dimethylphenol	U	10.0	ug/L	2.00	10.0	10.0
111-91-1	bis(2-Chloroethoxy)methane	U	10.0	ug/L	3.00	10.0	10.0
120-83-2	2,4-Dichlorophenol	U	10.0	ug/L	2.00	10.0	10.0
87-68-3	Hexachlorobutadiene	U	10.0	ug/L	2.00	10.0	10.0
59-50-7	4-Chloro-3-methylphenol	U	10.0	ug/L	2.00	10.0	10.0
91-20-3	Naphthalene	U	1.00	ug/L	0.300	1.00	10.0
77-47-4	Hexachlorocyclopentadiene	U	10.0	ug/L	3.00	10.0	10.0
88-06-2	2,4,6-Trichlorophenol	U	10.0	ug/L	2.00	10.0	10.0
91-58-7	2-Chloronaphthalene	U	1.00	ug/L	0.300	1.00	10.0
131-11-3	Dimethylphthalate	U	10.0	ug/L	2.00	10.0	10.0
606-20-2	2,6-Dinitrotoluene	U	10.0	ug/L	2.00	10.0	10.0
121-14-2	2,4-Dinitrotoluene	U	10.0	ug/L	2.00	10.0	10.0
208-96-8	Acenaphthylene	U	1.00	ug/L	0.200	1.00	10.0
83-32-9	Acenaphthene	U	1.00	ug/L	0.310	1.00	10.0
51-28-5	2,4-Dinitrophenol	U	20.0	ug/L	5.00	20.0	50.0
84-66-2	Diethylphthalate	U	10.0	ug/L	2.00	10.0	10.0
100-02-7	4-Nitrophenol	U	10.0	ug/L	2.00	10.0	50.0
86-73-7	Fluorene	U	1.00	ug/L	0.200	1.00	10.0
7005-72-3	4-Chlorophenylphenylether	U	10.0	ug/L	2.00	10.0	10.0
534-52-1	2-Methyl-4,6-dinitrophenol	U	10.0	ug/L	3.00	10.0	50.0
122-39-4	Diphenylamine	U	10.0	ug/L	3.00	10.0	10.0
101-55-3	4-Bromophenylphenylether	U	10.0	ug/L	2.00	10.0	10.0
118-74-1	Hexachlorobenzene	U	10.0	ug/L	2.00	10.0	10.0
87-86-5	Pentachlorophenol	U	10.0	ug/L	2.00	10.0	50.0
85-01-8	Phenanthrene	U	1.00	ug/L	0.200	1.00	10.0

Building 498 Cleaning Facility  
1/20/11

**Semi-Volatile  
Certificate of Analysis  
Sample Summary**

Page 2 of 2

SDG Number:	270848	Date Collected:	01/20/2011 11:15	Matrix:	W
Lab Sample ID:	270848001	Date Received:	01/21/2011 10:30		
Client Sample:	498-CF	Client:	BRKL006	Project:	BRKL00604
Client ID:	30893-001	Method:	EPA 625	SOP Ref:	GL-OA-E-009
Batch ID:	1067977	Inst:	MSD6.I	Dilution:	1
Run Date:	01/26/2011 14:12	Analyst:	JMB3	Inj. Vol:	1 uL
Prep Date:	01/25/2011 17:46	Aliquot:	1000 mL	Final Volume:	1 mL
Data File:	S012611.B\s6n2611.D	Column:	DB-5ms		

CAS No.	Parname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	RDL
120-12-7	Anthracene	U	1.00	ug/L	0.200	1.00	10.0
84-74-2	Di-n-butylphthalate	U	10.0	ug/L	2.00	10.0	10.0
206-44-0	Fluoranthene	U	1.00	ug/L	0.200	1.00	10.0
129-00-0	Pyrene	U	1.00	ug/L	0.300	1.00	10.0
85-68-7	Butylbenzylphthalate	U	10.0	ug/L	2.00	10.0	10.0
117-81-7	bis(2-Ethylhexyl)phthalate	U	10.0	ug/L	2.00	10.0	10.0
56-55-3	Benzo(a)anthracene	U	1.00	ug/L	0.200	1.00	10.0
218-01-9	Chrysene	U	1.00	ug/L	0.200	1.00	10.0
117-84-0	Di-n-octylphthalate	U	10.0	ug/L	3.00	10.0	10.0
205-99-2	Benzo(b)fluoranthene	U	1.00	ug/L	0.200	1.00	10.0
207-08-9	Benzo(k)fluoranthene	U	1.00	ug/L	0.200	1.00	10.0
50-32-8	Benzo(a)pyrene	U	1.00	ug/L	0.200	1.00	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	U	1.00	ug/L	0.200	1.00	10.0
53-70-3	Dibenzo(a,h)anthracene	U	1.00	ug/L	0.200	1.00	10.0
191-24-2	Benzo(ghi)perylene	U	1.00	ug/L	0.200	1.00	10.0
91-94-1	3,3'-Dichlorobenzidine	U	10.0	ug/L	2.00	10.0	40.0
120-82-1	1,2,4-Trichlorobenzene	U	10.0	ug/L	2.00	10.0	10.0

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 270848

METHOD TYPE: SW846

SAMPLE ID: 270848001

CLIENT ID: 30893-001

CONTRACT: BRKL00604

MATRIX:W

DATE RECEIVED 21-JAN-11

LEVEL: Low %SOLIDS:

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7429-90-5	Aluminum	84.6	ug/L	B		P	68	1	OPTIMA1	012511B-1
7440-36-0	Antimony	3.5	ug/L	U		P	3.5	1	OPTIMA1	012511B-1
7440-38-2	Arsenic	1.7	ug/L	U		MS	1.7	1	ICPMS5	110214-3
7440-39-3	Barium	1.81	ug/L	B		P	1	1	OPTIMA1	012511B-1
7440-41-7	Beryllium	1	ug/L	U		P	1	1	OPTIMA1	012511B-1
7440-43-9	Cadmium	1	ug/L	U		P	1	1	OPTIMA1	012511B-1
7440-70-2	Calcium	240	ug/L	B		P	50	1	OPTIMA1	012511B-1
7440-47-3	Chromium	98	ug/L			P	1	1	OPTIMA1	012511B-1
7440-48-4	Cobalt	1	ug/L	U		P	1	1	OPTIMA1	012511B-1
7440-50-8	Copper	2710	ug/L			P	3	1	OPTIMA1	012511B-1
7439-89-6	Iron	972	ug/L			P	30	1	OPTIMA1	012511B-1
7439-92-1	Lead	5.81	ug/L	B		MS	0.5	1	ICPMS5	110211-2
7439-95-4	Magnesium	110	ug/L	U		P	110	1	OPTIMA1	012511B-1
7439-96-5	Manganese	8.02	ug/L	B		P	2	1	OPTIMA1	012511B-1
7439-97-6	Mercury	0.066	ug/L	U		AV	0.066	1	MER536	020111W2-4
7440-02-0	Nickel	43.9	ug/L			P	1.5	1	OPTIMA1	012511B-1
7440-09-7	Potassium	136	ug/L	B		P	50	1	OPTIMA1	012511B-1
7782-49-2	Selenium	1.5	ug/L	U		MS	1.5	1	ICPMS5	110211-2
7440-22-4	Silver	1	ug/L	U		P	1	1	OPTIMA1	012511B-1
7440-23-5	Sodium	16900	ug/L			P	100	1	OPTIMA1	012511B-1
7440-28-0	Thallium	0.45	ug/L	U		MS	0.45	1	ICPMS5	110211-2
7440-31-5	Tin	2.5	ug/L	U		P	2.5	1	OPTIMA1	012511B-1
7440-62-2	Vanadium	1	ug/L	U		P	1	1	OPTIMA1	012511B-1
7440-66-6	Zinc	15.1	ug/L	B		P	3.3	1	OPTIMA1	012511B-1

Building 498 Cleaning Facility  
 1/20/11

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: March 31, 2011

Company : Brookhaven National Laboratory  
Address : Building 462

Contact: Upton, New York 11973--5000  
Mr. John Burke  
Project: ES SPDES - Summary

Client Sample ID: 31050-003  
Sample ID: 274183003  
Matrix: W  
Collect Date: 16-MAR-11 11:40  
Receive Date: 18-MAR-11 08:45  
Collector: Client

Project: BRKL00604  
Client ID: BRKL006  
COC: 31050  
Samp Recv.:  
Client Desc.: HN  
Vol. Recv.:

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Oil &amp; Grease Analysis</b>											
EPA 1664A n-Hexane Extractable Material (Oil and G "As Received"	J	2.32	1.16	4.15	mg/L		JXTI	03/28/11	1059	1086902	I

The following Analytical Methods were performed

Method	Description	Analyst Comments
I	EPA 1664A	

Outfall 002 (HN)  
sampled 3/16/11

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: March 31, 2011

Company : Brookhaven National Laboratory  
Address : Building 462

Contact: Upton, New York 11973-5000  
Project: Mr. John Burke  
Project: ES SPDES - Summary

Client Sample ID:	31050-001	Project:	BRKL00604
Sample ID:	274183001	Client ID:	BRKL006
Matrix:	W	COC:	31050
Collect Date:	16-MAR-11 11:05	Samp Recv.:	
Receive Date:	18-MAR-11 08:45	Client Desc.:	HT-W
Collector:	Client	Vol. Recv.:	

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Oil &amp; Grease Analysis</b>											
EPA 1664A n-Hexane Extractable Material (Oil and G "As Received"											
Oil and Grease	J	1.76	1.12	4.00	mg/L		JXTI	03/28/11	1059	1086902	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 1664A	

Outfall 006A( HTW)  
Sampled 3/16/11

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: April 1, 2011

Company : Brookhaven National Laboratory  
Address : Building 462

Contact: Upton, New York 11973--5000  
Mr. John Burke  
Project: ES SPDES - Summary

Client Sample ID: 31036-002  
Sample ID: 273881002  
Matrix: W  
Collect Date: 11-MAR-11 10:15  
Receive Date: 12-MAR-11 09:25  
Collector: Client

Project: BRKL00604  
Client ID: BRKL006  
COC: 31036  
Samp Recv.:  
Client Desc.: HW  
Vol. Recv.:

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Oil &amp; Grease Analysis</b>											
EPA 1664A n-Hexane Extractable Material (Oil and G "As Received"											
Oil and Grease J 2.56											
Volatile Organics			1.12	4.00	mg/L		JXTI	03/30/11	0939	1087696	1
<b>EPA 624 Method List "As Received"</b>											
1,1,1-Trichloroethane	U	ND	0.325	5.00	ug/L	1	SYK1	03/17/11	2111	1084023	2
1,1,2,2-Tetrachloroethane	U	ND	0.250	5.00	ug/L	1					
1,1,2-Trichloroethane	U	ND	0.250	5.00	ug/L	1					
1,1-Dichloroethane	U	ND	0.300	5.00	ug/L	1					
1,1-Dichloroethylene	U	ND	0.300	5.00	ug/L	1					
1,2-Dichlorobenzene	U	ND	0.250	5.00	ug/L	1					
1,2-Dichloroethane	U	ND	0.250	5.00	ug/L	1					
1,2-Dichloropropane	U	ND	0.250	5.00	ug/L	1					
1,3-Dichlorobenzene	U	ND	0.250	5.00	ug/L	1					
1,4-Dichlorobenzene	U	ND	0.250	5.00	ug/L	1					
2-Chloroethylvinyl ether	U	ND	1.50	10.0	ug/L	1					
Acetonitrile	U	ND	6.25	25.0	ug/L	1					
Benzene	U	ND	0.300	5.00	ug/L	1					
Bromodichloromethane	U	ND	0.250	5.00	ug/L	1					
Bromoform	U	ND	0.250	5.00	ug/L	1					
Bromomethane	U	ND	0.300	10.0	ug/L	1					
Carbon tetrachloride	U	ND	0.300	5.00	ug/L	1					
Chlorobenzene	U	ND	0.250	5.00	ug/L	1					
Chloroethane	U	ND	0.300	10.0	ug/L	1					
Chloroform	U	ND	0.250	5.00	ug/L	1					
Chloromethane	U	ND	0.300	10.0	ug/L	1					
Dibromochloromethane	U	ND	0.300	5.00	ug/L	1					
Ethylbenzene	U	ND	0.250	5.00	ug/L	1					
Methylene chloride	U	ND	2.00	5.00	ug/L	1					
Tetrachloroethylene	U	ND	0.300	5.00	ug/L	1					
Toluene	U	ND	0.250	5.00	ug/L	1					
Trichloroethylene	U	ND	0.250	5.00	ug/L	1					
Trichlorofluoromethane	U	ND	0.300	5.00	ug/L	1					
Vinyl chloride	U	ND	0.500	10.0	ug/L	1					
cis-1,3-Dichloropropylene	U	ND	0.250	5.00	ug/L	1					
tert-Butyl methyl ether	U	ND	0.250	10.0	ug/L	1					
trans-1,2-Dichloroethylene	U	ND	0.300	5.00	ug/L	1					
trans-1,3-Dichloropropylene	U	ND	0.250	5.00	ug/L	1					

Outfall 008  
(HW)  
3/11/11

**GEL LABORATORIES LLC**  
2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

**Certificate of Analysis**

Report Date: April 1, 2011

Company : Brookhaven National Laboratory  
Address : Building 462

Contact: Upton, New York 11973-5000  
Mr. John Burke  
Project: ES SPDES - Summary

Client Sample ID: 31036-003  
Sample ID: 273881003  
Matrix: W  
Collect Date: 11-MAR-11 09:30  
Receive Date: 12-MAR-11 09:25  
Collector: Client

Project: BRKL00604  
Client ID: BRKL006  
COC: 31036  
Samp Recv.:  
Client Desc.: CSF-Outfall  
Vol. Recv.:

Parameter	Qualifier	Result	DL	RL	Units	DF	Analyst	Date	Time	Batch	Method
<b>Oil &amp; Grease Analysis</b>											
EPA 1664A n-Hexane Extractable Material (Oil and G "As Received"	J	1.71	1.14	4.07	mg/L		JXT1	03/30/11	0939	1087696	1

The following Analytical Methods were performed

Method	Description	Analyst Comments
1	EPA 1664A	

Outfall 010 (CSF)  
3/11/11

**Volatile  
Certificate of Analysis  
Sample Summary**

Page 1 of 1

SDG Number:	270060	Date Collected:	01/07/2011 11:40	Matrix:	W
Lab Sample ID:	270060003	Date Received:	01/08/2011 09:20		
Client Sample:	HN	Client:	BRKL006	Project:	BRKL00604
Client ID:	30862-003	Method:	EPA 624	SOP Ref:	GL-OA-E-026
Batch ID:	1064251	Inst:	VOA1.I	Dilution:	1
Run Date:	01/12/2011 22:19	Analyst:	RXM4	Purge Vol:	5 mL
Prep Date:	01/12/2011 22:19				
Data File:	011211V1\1V326.D	Column:	RTX-624		

CAS No.	Paramname	Qualifier	Result	Units	MDL/LOD	PQL/LOQ	RDL
74-87-3	Chloromethane	U	1.00	ug/L	0.300	1.00	10.0
75-01-4	Vinyl chloride	U	1.00	ug/L	0.500	1.00	10.0
74-83-9	Bromomethane	U	1.00	ug/L	0.300	1.00	10.0
75-00-3	Chloroethane	U	1.00	ug/L	0.300	1.00	10.0
75-69-4	Trichlorofluoromethane	U	1.00	ug/L	0.300	1.00	5.00
75-05-8	Acetonitrile	U	25.0	ug/L	6.25	25.0	25.0
75-35-4	1,1-Dichloroethylene	U	1.00	ug/L	0.300	1.00	5.00
75-09-2	Methylene chloride	U	2.00	ug/L	2.00	2.00	5.00
1634-04-4	tert-Butyl methyl ether	U	5.00	ug/L	0.250	5.00	10.0
156-60-5	trans-1,2-Dichloroethylene	U	1.00	ug/L	0.300	1.00	5.00
75-34-3	1,1-Dichloroethane	U	1.00	ug/L	0.300	1.00	5.00
67-66-3	Chloroform	U	1.00	ug/L	0.250	1.00	5.00
71-55-6	1,1,1-Trichloroethane	U	1.00	ug/L	0.325	1.00	5.00
56-23-5	Carbon tetrachloride	U	1.00	ug/L	0.300	1.00	5.00
107-06-2	1,2-Dichloroethane	U	1.00	ug/L	0.250	1.00	5.00
71-43-2	Benzene	U	1.00	ug/L	0.300	1.00	5.00
79-01-6	Trichloroethylene	U	1.00	ug/L	0.250	1.00	5.00
78-87-5	1,2-Dichloropropane	U	1.00	ug/L	0.250	1.00	5.00
75-27-4	Bromodichloromethane	U	1.00	ug/L	0.250	1.00	5.00
110-75-8	2-Chloroethylvinyl ether	U	5.00	ug/L	1.50	5.00	10.0
10061-01-5	cis-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00	5.00
108-88-3	Toluene	U	1.00	ug/L	0.250	1.00	5.00
10061-02-6	trans-1,3-Dichloropropylene	U	1.00	ug/L	0.250	1.00	5.00
79-00-5	1,1,2-Trichloroethane	U	1.00	ug/L	0.250	1.00	5.00
127-18-4	Tetrachloroethylene	U	1.00	ug/L	0.300	1.00	5.00
124-48-1	Dibromochloromethane	U	1.00	ug/L	0.300	1.00	5.00
108-90-7	Chlorobenzene	U	1.00	ug/L	0.250	1.00	5.00
100-41-4	Ethylbenzene	U	1.00	ug/L	0.250	1.00	5.00
75-25-2	Bromoform	U	1.00	ug/L	0.250	1.00	5.00
79-34-5	1,1,2,2-Tetrachloroethane	U	1.00	ug/L	0.250	1.00	5.00
541-73-1	1,3-Dichlorobenzene	J	0.260	ug/L	0.250	1.00	5.00
106-46-7	1,4-Dichlorobenzene	U	1.00	ug/L	0.250	1.00	5.00
95-50-1	1,2-Dichlorobenzene	J	0.280	ug/L	0.250	1.00	5.00

Run Fall 002 (Hn)  
 Sampled 1/7/11

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 270060

METHOD TYPE: SW846

SAMPLE ID: 270060003

CLIENT ID: 30862-003

CONTRACT: BRKL00604

MATRIX: W

DATE RECEIVED 08-JAN-11

LEVEL: Low

%SOLIDS:

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7429-90-5	Aluminum	68	ug/L	U		P	68	1	OPTIMA3	011411A-1
7440-36-0	Antimony	3	ug/L	U		P	3	1	OPTIMA3	011411A-1
7440-38-2	Arsenic	1.7	ug/L	U		MS	1.7	1	ICPMS5	110120-2
7440-39-3	Barium	24.1	ug/L	B		P	1	1	OPTIMA3	011411A-1
7440-41-7	Beryllium	1	ug/L	U		P	1	1	OPTIMA3	011411A-1
7440-43-9	Cadmium	1	ug/L	U		P	1	1	OPTIMA3	011411A-1
7440-70-2	Calcium	15300	ug/L			P	50	1	OPTIMA3	011411A-1
7440-47-3	Chromium	1	ug/L	U		P	1	1	OPTIMA3	011411A-1
7440-48-4	Cobalt	1	ug/L	U		P	1	1	OPTIMA3	011411A-1
7440-50-8	Copper	24.5	ug/L	B		P	3	1	OPTIMA3	011411A-1
7439-89-6	Iron	125	ug/L			P	30	1	OPTIMA3	011411A-1
7439-92-1	Lead	0.945	ug/L	B		MS	0.5	1	ICPMS5	110120-2
7439-95-4	Magnesium	4170	ug/L	B		P	85	1	OPTIMA3	011411A-1
7439-96-5	Manganese	5.69	ug/L	B		P	2	1	OPTIMA3	011411A-1
7439-97-6	Mercury	0.066	ug/L	U		AV	0.066	1	HG3	011311W1-3
7440-02-0	Nickel	1.5	ug/L	U		P	1.5	1	OPTIMA3	011411A-1
7440-09-7	Potassium	2470	ug/L	B		P	50	1	OPTIMA3	011411A-1
7782-49-2	Selenium	1.5	ug/L	U		MS	1.5	1	ICPMS5	110120-2
7440-22-4	Silver	1	ug/L	U		P	1	1	OPTIMA3	011411A-1
7440-23-5	Sodium	45500	ug/L			P	100	1	OPTIMA3	011411A-1
7440-28-0	Thallium	0.45	ug/L	U		MS	0.45	1	ICPMS5	110120-2
7440-31-5	Tin	2.5	ug/L	U		P	2.5	1	OPTIMA3	011411A-1
7440-62-2	Vanadium	1	ug/L	U		P	1	1	OPTIMA3	011411A-1
7440-66-6	Zinc	80.2	ug/L			P	3.3	1	OPTIMA3	011411A-1

Outfall 002 (4W)  
 Sampled 1/7/11  
 Unfiltered

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 270060

METHOD TYPE: SW846

SAMPLE ID: 270060004

CLIENT ID: 30862-004

CONTRACT: BRKL00604

MATRIX:W

DATE RECEIVED 08-JAN-11

LEVEL: Low %SOLIDS:

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7429-90-5	Aluminum	68	ug/L	U		P	68	1	OPTIMA3	011411A-1
7440-36-0	Antimony	3	ug/L	U		P	3	1	OPTIMA3	011411A-1
7440-38-2	Arsenic	1.7	ug/L	U		MS	1.7	1	ICPMS5	110120-2
7440-39-3	Barium	23.7	ug/L	B		P	1	1	OPTIMA3	011411A-1
7440-41-7	Beryllium	1	ug/L	U		P	1	1	OPTIMA3	011411A-1
7440-43-9	Cadmium	1	ug/L	U		P	1	1	OPTIMA3	011411A-1
7440-70-2	Calcium	15500	ug/L			P	50	1	OPTIMA3	011411A-1
7440-47-3	Chromium	1	ug/L	U		P	1	1	OPTIMA3	011411A-1
7440-48-4	Cobalt	1	ug/L	U		P	1	1	OPTIMA3	011411A-1
7440-50-8	Copper	19.3	ug/L	B		P	3	1	OPTIMA3	011411A-1
7439-89-6	Iron	73.3	ug/L	B		P	30	1	OPTIMA3	011411A-1
7439-92-1	Lead	0.5	ug/L	U		MS	0.5	1	ICPMS5	110120-2
7439-95-4	Magnesium	4220	ug/L	B		P	85	1	OPTIMA3	011411A-1
7439-96-5	Manganese	4.95	ug/L	B		P	2	1	OPTIMA3	011411A-1
7439-97-6	Mercury	0.066	ug/L	U		AV	0.066	1	HG3	011311W1-3
7440-02-0	Nickel	1.5	ug/L	U		P	1.5	1	OPTIMA3	011411A-1
7440-09-7	Potassium	2470	ug/L	B		P	50	1	OPTIMA3	011411A-1
7782-49-2	Selenium	1.5	ug/L	U		MS	1.5	1	ICPMS5	110120-2
7440-22-4	Silver	1	ug/L	U		P	1	1	OPTIMA3	011411A-1
7440-23-5	Sodium	45500	ug/L			P	100	1	OPTIMA3	011411A-1
7440-28-0	Thallium	0.45	ug/L	U		MS	0.45	1	ICPMS5	110120-2
7440-31-5	Tin	2.5	ug/L	U		P	2.5	1	OPTIMA3	011411A-1
7440-62-2	Vanadium	1	ug/L	U		P	1	1	OPTIMA3	011411A-1
7440-66-6	Zinc	78	ug/L			P	3.3	1	OPTIMA3	011411A-1

outfall 002 (Hn)  
 Sampled 1-7-11  
 F1 frcd

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 270060

METHOD TYPE: SW846

SAMPLE ID: 270060005

CLIENT ID: 30862-005

CONTRACT: BRKL00604

MATRIX:W

DATE RECEIVED 08-JAN-11

LEVEL: Low

%SOLIDS:

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7429-90-5	Aluminum	68	ug/L	U		P	68	1	OPTIMA3	011411A-1
7440-36-0	Antimony	3	ug/L	U		P	3	1	OPTIMA3	011411A-1
7440-38-2	Arsenic	1.7	ug/L	U		MS	1.7	1	ICPMS5	110120-2
7440-39-3	Barium	33.9	ug/L	B		P	1	1	OPTIMA3	011411A-1
7440-41-7	Beryllium	1	ug/L	U		P	1	1	OPTIMA3	011411A-1
7440-43-9	Cadmium	1	ug/L	U		P	1	1	OPTIMA3	011411A-1
7440-70-2	Calcium	16700	ug/L			P	50	1	OPTIMA3	011411A-1
7440-47-3	Chromium	6.9	ug/L	B		P	1	1	OPTIMA3	011411A-1
7440-48-4	Cobalt	1	ug/L	U		P	1	1	OPTIMA3	011411A-1
7440-50-8	Copper	3	ug/L	U		P	3	1	OPTIMA3	011411A-1
7439-89-6	Iron	63	ug/L	B		P	30	1	OPTIMA3	011411A-1
7439-92-1	Lead	0.5	ug/L	U		MS	0.5	1	ICPMS5	110120-2
7439-95-4	Magnesium	4430	ug/L	B		P	85	1	OPTIMA3	011411A-1
7439-96-5	Manganese	3	ug/L	B		P	2	1	OPTIMA3	011411A-1
7439-97-6	Mercury	0.066	ug/L	U		AV	0.066	1	HG3	011311W1-3
7440-02-0	Nickel	1.5	ug/L	U		P	1.5	1	OPTIMA3	011411A-1
7440-09-7	Potassium	2260	ug/L	B		P	50	1	OPTIMA3	011411A-1
7782-49-2	Selenium	1.5	ug/L	U		MS	1.5	1	ICPMS5	110120-2
7440-22-4	Silver	1	ug/L	U		P	1	1	OPTIMA3	011411A-1
7440-23-5	Sodium	35700	ug/L			P	100	1	OPTIMA3	011411A-1
7440-28-0	Thallium	0.45	ug/L	U		MS	0.45	1	ICPMS5	110120-2
7440-31-5	Tin	2.5	ug/L	U		P	2.5	1	OPTIMA3	011411A-1
7440-62-2	Vanadium	1	ug/L	U		P	1	1	OPTIMA3	011411A-1
7440-66-6	Zinc	6.27	ug/L	B		P	3.3	1	OPTIMA3	011411A-1

Outfall 005 (HS)  
 Sampled 1/7/11  
 Unfiltered

**METALS**  
-1-  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 270639

METHOD TYPE: SW846

SAMPLE ID: 270639003

CLIENT ID: 30880-003

CONTRACT: BRKL00604

MATRIX:W DATE RECEIVED 19-JAN-11 LEVEL: Low %SOLIDS:

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7429-90-5	Aluminum	183	ug/L	B		P	68	1	OPTIMA4	012811-1
7440-36-0	Antimony	3.5	ug/L	U		P	3.5	1	OPTIMA4	012811-1
7440-38-2	Arsenic	1.7	ug/L	U		MS	1.7	1	ICPMS5	110121-2
7440-39-3	Barium	6.57	ug/L	B		P	1	1	OPTIMA4	012811-1
7440-41-7	Beryllium	1	ug/L	U		P	1	1	OPTIMA4	012811-1
7440-43-9	Cadmium	1	ug/L	U		P	1	1	OPTIMA4	012811-1
7440-70-2	Calcium	23500	ug/L			P	50	1	OPTIMA4	012811-1
7440-47-3	Chromium	1.87	ug/L	B		P	1	1	OPTIMA4	012811-1
7440-48-4	Cobalt	1	ug/L	U		P	1	1	OPTIMA4	012811-1
7440-50-8	Copper	3	ug/L	U		P	3	1	OPTIMA4	012811-1
7439-89-6	Iron	133	ug/L			P	30	1	OPTIMA4	012811-1
7439-92-1	Lead	0.5	ug/L	U		MS	0.5	1	ICPMS5	110121-2
7439-95-4	Magnesium	1730	ug/L	B		P	110	1	OPTIMA4	012811-1
7439-96-5	Manganese	7.5	ug/L	B		P	2	1	OPTIMA4	012811-1
7439-97-6	Mercury	0.066	ug/L	U		AV	0.066	1	MER536	012111W2-3
7440-02-0	Nickel	1.5	ug/L	U		P	1.5	1	OPTIMA4	012811-1
7440-09-7	Potassium	1820	ug/L	B		P	50	1	OPTIMA4	012811-1
7782-49-2	Selenium	1.5	ug/L	U		MS	1.5	1	ICPMS5	110121-2
7440-22-4	Silver	1	ug/L	U		P	1	1	OPTIMA4	012811-1
7440-23-5	Sodium	31500	ug/L			P	100	1	OPTIMA4	012811-1
7440-28-0	Thallium	0.45	ug/L	U		MS	0.45	1	ICPMS5	110121-2
7440-31-5	Tin	2.5	ug/L	U		P	2.5	1	OPTIMA4	012811-1
7440-62-2	Vanadium	1.1	ug/L	B		P	1	1	OPTIMA4	012811-1
7440-66-6	Zinc	4.03	ug/L	B		P	3.3	1	OPTIMA4	012811-1

Outfall 008 (Hw)  
Sampled 1/18/11

**METALS**  
**-1-**  
**INORGANICS ANALYSIS DATA PACKAGE**

SDG No: 270639

METHOD TYPE: SW846

SAMPLE ID: 270639005

CLIENT ID: 30880-005

CONTRACT: BRKL00604

MATRIX: W

DATE RECEIVED 19-JAN-11

LEVEL: Low

%SOLIDS:

CAS No	Analyte	Result	Units	C	Qual	M	MDL	DF	Instrument ID	Analytical Run
7429-90-5	Aluminum	68	ug/L	U		P	68	1	OPTIMA4	012811-1
7440-36-0	Antimony	3.5	ug/L	U		P	3.5	1	OPTIMA4	012811-1
7440-38-2	Arsenic	1.7	ug/L	U		MS	1.7	1	ICPMS5	110121-2
7440-39-3	Barium	13.4	ug/L	B		P	1	1	OPTIMA4	012811-1
7440-41-7	Beryllium	1	ug/L	U		P	1	1	OPTIMA4	012811-1
7440-43-9	Cadmium	1	ug/L	U		P	1	1	OPTIMA4	012811-1
7440-70-2	Calcium	48000	ug/L			P	50	1	OPTIMA4	012811-1
7440-47-3	Chromium	1.37	ug/L	B		P	1	1	OPTIMA4	012811-1
7440-48-4	Cobalt	1	ug/L	U		P	1	1	OPTIMA4	012811-1
7440-50-8	Copper	3.52	ug/L	B		P	3	1	OPTIMA4	012811-1
7439-89-6	Iron	51.6	ug/L	B		P	30	1	OPTIMA4	012811-1
7439-92-1	Lead	0.5	ug/L	U		MS	0.5	1	ICPMS5	110121-2
7439-95-4	Magnesium	1140	ug/L	B		P	110	1	OPTIMA4	012811-1
7439-96-5	Manganese	15.9	ug/L			P	2	1	OPTIMA4	012811-1
7439-97-6	Mercury	0.066	ug/L	U		AV	0.066	1	MER536	012111W2-3
7440-02-0	Nickel	1.5	ug/L	U		P	1.5	1	OPTIMA4	012811-1
7440-09-7	Potassium	4960	ug/L	B		P	50	1	OPTIMA4	012811-1
7782-49-2	Selenium	1.5	ug/L	U		MS	1.5	1	ICPMS5	110121-2
7440-22-4	Silver	1	ug/L	U		P	1	1	OPTIMA4	012811-1
7440-23-5	Sodium	367000	ug/L			P	100	1	OPTIMA4	012811-1
7440-28-0	Thallium	0.45	ug/L	U		MS	0.45	1	ICPMS5	110121-2
7440-31-5	Tin	2.5	ug/L	U		P	2.5	1	OPTIMA4	012811-1
7440-62-2	Vanadium	1.11	ug/L	B		P	1	1	OPTIMA4	012811-1
7440-66-6	Zinc	14.7	ug/L	B		P	3.3	1	OPTIMA4	012811-1

Outfall 010 (CSP)  
 Sampled 1/18/11

Client: Brookhaven National Laboratory  
 Safety & Environmental Protection Division  
 Bldg. 535A  
 Upton, NY 11973-5000

Attn: Mr. B. Lee  
 Phone: 1-631-344-3148  
E-mail: blee@bnl.gov

Reporting Date: 01/21/11  
 Sample Matrix: Water  
 Date Collected: 01/07/11  
 Time Collected: See Below  
 Collected by: Client  
 Date Received: 01/08/11  
 Time Received: 11:10am  
 CHEMTEX File #: P11010206

**RESULTS OF ANALYSIS**  
**PROJECT NAME: ES SPDES**  
**CHAIN OF CUSTODY NO: 30863**

CHEMTEX ID	Sample ID	Parameter	Units	Results	RL	Qual
P11010206	HT-W (11:20)	HEDP as Organic Phosphorus	mg/l	<0.25	0.25	
		Inorganic Phosphorus	mg/l	0.67	0.25	
		Total Phosphorus	mg/l	0.91	0.25	
		Tolytriazole(TTA)	mg/l	<0.005	0.005	
P11010207	HT-E (11:30)	HEDP as Organic Phosphorus	mg/l	<0.25	0.25	
		Inorganic Phosphorus	mg/l	1.02	0.25	
		Total Phosphorus	mg/l	1.05	0.25	
		Tolytriazole(TTA)	mg/l	<0.005	0.005	
P11010208	HN (11:40)	HEDP as Organic Phosphorus	mg/l	<0.25	0.25	
		Inorganic Phosphorus	mg/l	1.31	0.25	
		Total Phosphorus	mg/l	1.46	0.25	
		Tolytriazole(TTA)	mg/l	<0.005	0.005	
P11010209	HS (10:50)	HEDP as Organic Phosphorus	mg/l	0.25	0.25	
		Inorganic Phosphorus	mg/l	0.89	0.25	
		Total Phosphorus	mg/l	1.15	0.25	
		Tolytriazole(TTA)	mg/l	<0.005	0.005	
P11010210	902 Cooling Tower (11:10)	Polypropylene Glycol Monobutyl Ether (PPGMBE)	mg/l	<0.5	0.5	
P11010211	Field Blank #1 (10:00)	HEDP as Organic Phosphorus	mg/l	<0.05	0.05	
		Inorganic Phosphorus	mg/l	<0.05	0.05	
		Total Phosphorus	mg/l	<0.05	0.05	
		Tolytriazole(TTA)	mg/l	<0.005	0.005	

RL: Reporting Limit.

Qualifier Definition:

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Reporting Date: 01/24/11  
 Sample Matrix: Water  
 Date Collected: 01/18/11  
 Time Collected: See Below  
 Collected by: Client  
 Date Received: 01/19/11  
 Time Received: 9:40am  
 CHEMTEX File #: P11010428

### RESULTS OF ANALYSIS

PROJECT NAME: ES SPDES  
 CHAIN OF CUSTODY NO: 30881

CHEMTEX ID	Sample ID	Parameter	Units	Results	RL	Qual
P11010428	1004/1002 (13:15)	HEDP as Organic Phosphorus	mg/l	<0.05	0.05	
		Inorganic Phosphorus	mg/l	0.08	0.05	
		Total Phosphorus	mg/l	0.10	0.05	
		Tolytriazole(TTA)	mg/l	<0.005	0.005	
P11010429	FB-1 (13:05)	HEDP as Organic Phosphorus	mg/l	<0.05	0.05	
		Inorganic Phosphorus	mg/l	<0.05	0.05	
		Total Phosphorus	mg/l	<0.05	0.05	
		Tolytriazole(TTA)	mg/l	<0.005	0.005	

RL: Reporting Limit.

Qualifier Definition:

### LABORATORY QUALITY CONTROL DATA

Method References/Analysis Dates & Analysts

Parameter	Method Reference	Date Analyzed/Analyzed By
Phosphorus	EPA Method 365.3	01/20/11 YS
Tolytriazole(TTA)	SOP#: O121-049	01/19/11 SPR

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